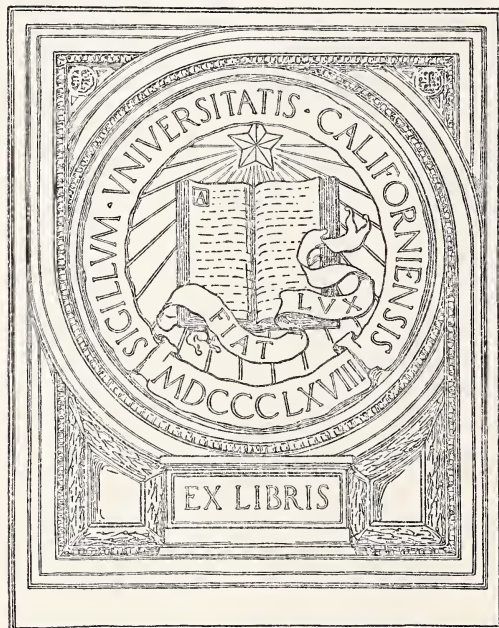


UC-NRLF



B 4 144 853

MEDICAL SCHOOL
LIBRARY



GIFT OF THE
SAN FRANCISCO COUNTY
MEDICAL SOCIETY

This book is due on last date given below. A fine of
5c will be charged for each day the book is kept overtime.

Date Due

[illegible]

THE JOURNAL
OF THE
MEDICAL SOCIETY OF
NEW JERSEY.

PUBLISHED MONTHLY UNDER THE DIRECTION
OF THE BOARD OF TRUSTEES.



Volume IV.

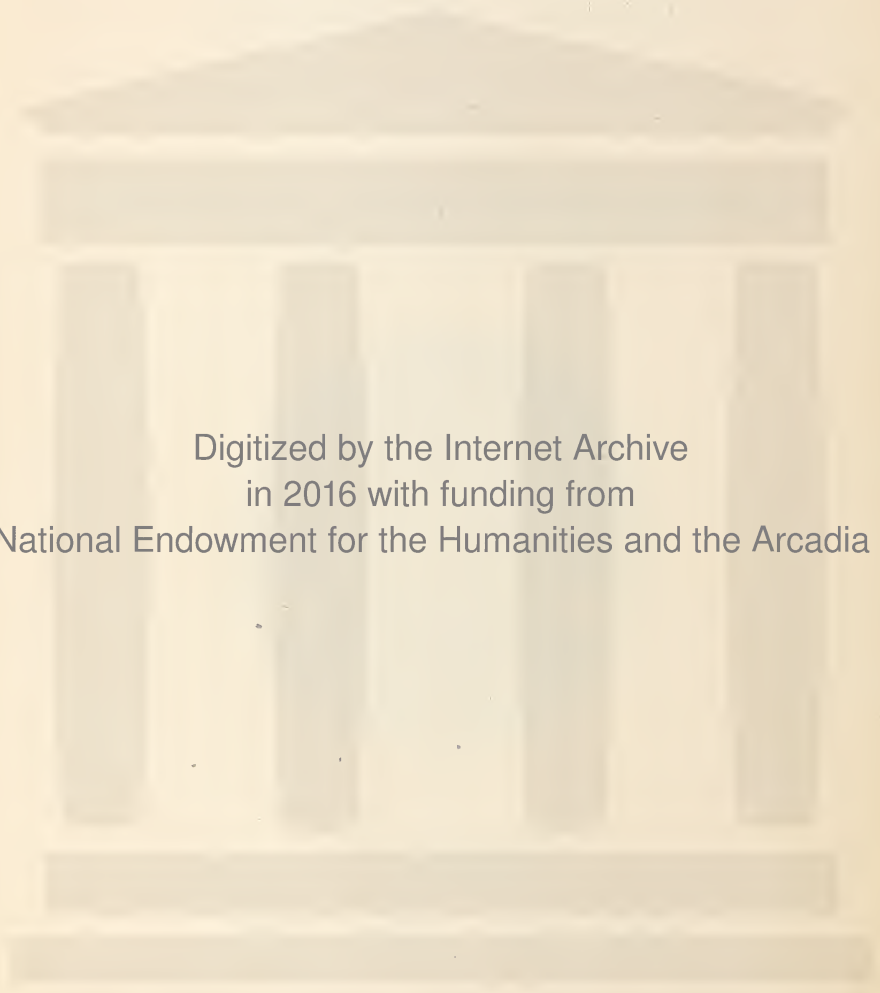
July 1907—May 1908.

Publication Committee :

DRS. WM. J. CHANDLER, CHARLES J. KIPP, ELLIS W. HEDGES.
95 Essex Avenue, Orange, N. J.

Editor :

DAVID C. ENGLISH, M. D.
New Brunswick, N. J.



Digitized by the Internet Archive
in 2016 with funding from
The National Endowment for the Humanities and the Arcadia Fund

INDEX.

Articles are, in many instances, listed in this Index under more than one head. All important business items of the annual meeting, as recorded in the August, 1907, Supplement, will be found under the heading "Transactions of the House of Delegates." Reports of County Societies and local organizations within their bounds, as well as those of State and National medical organizations, will be found under "Societies." Brief items from current medical literature are indexed under "Current Literature." The abbreviations are as follows: (O) Original Articles; (E) Editorials; (C) Correspondence; (BR) Book Review.

A

Abortionists, Places Maintained by, Public Nuisances	215
Accident Insurance Policy covering blood-poisoning	351
Adrenalin, Use of during ether anaesthesia.....	347
Address—President Alex. Marcy, Jr., State Society	1
Address—Dr. A. H. Lippincott, president Camden County Society	385
Alcohol, Dr. Marcy on the Use of (E).....	90
Alcoholic Problem, The. Dr. T. D. Crothers.....	432
Alcoholism, Complications of	463
Alkaloidal Medication. Dr. J. Burke.....	240
American Medical Ass'n, Amer. Public Health Ass'n, etc. See Societies.	
American Physicians and the distortion of truth	163
Anderson, W. C., Phar. D. (O). The Physician and the Pharmacist	456
Animal Experimentation (C). Dr. H. A. Kelly.....	436
Antitoxin—Free in Illinois	394
Antitoxin in Diphtheria—Prophylactic use of.....	348
Antitoxin, Sudden Death following use of	390
Appendicitis—Classification of cases of (O). Dr. John J. McGrath	380
Appendicitis Operation on an Ocean steamer.....	356
Appendicitis complicating pregnancy—case 8th month	427
Appendix—Gangrenous in infant, case.....	426
Ascariades Affection, case	426
Associations—Evolution of—N. J. S. A. (O). Dr. G. K. Dickinson	275
Atlantic County Society. See Societies.	

B

Baer, Dr. B. F. Discusses paper on ruptured extrauterine pregnancy	148
Baer, Dr. J. S. (O). When to operate in ruptured extrauterine pregnancy	150
Baker, Dr. Chas. F. (O). Fracture of head of radius, two cases	415
Baldwin, Dr. A. K. Discusses paper on State medical examination and Interstate Reciprocity	73, 74
Ball, Dr. M. V. An active County Society President	207
Balleray, Dr. G. H. Discusses paper on State medical examinations and Interstate Reciprocity	74
Beates, Dr. H. Criticism of medical college graduates	350
Beling, Dr. C. C. Discusses paper on the Lymphatics	78
Benjamin, Dr. D. Discusses paper on State medical examinations and Interstate Reciprocity	73
Bennett, Dr. J. W. Discusses paper on State medical examinations, etc.	157
Bennett, Dr. J. W. (C). Medical college standing Bergen County Medical Society. See Societies.	252
Biliary Passages, Surgery of. See Gall Bladder.	
Biliary System, Complications in Disease conditions of (O). Dr. G. K. Dickinson.....	194
Bladder, A piece of paper in the, case.....	427
Blake, Dr. D. W. Discusses paper on the Eruptive Diseases	306
Blood Pressure in Surgical Shock (O). Dr. A. J. Walschied	232
Book Reviews—	
Blues, The, Splanchnic Neurasthenia. Dr. Abrams	476
Bradycardia and Tachycardia. Prof. E. Von Neusser	476
Common Sense and the Baby. Dr. T. N. Gray	440
Dermatology, Principles and Practice of. Dr. W. A. Pusey	29
Diseases of the Rectum. Dr. Brinckerhoff.....	100
Diseases of the Nervous System. Prof. A. Church	292
Dyspnoea and Cyanosis. Prof. von Neusser.....	325
Gonorrhoea, Diagnosis and Treatment. Dr. F. Baumann	356
Internal Secretions and the Principles of Medicine. Prof. C. E. D. Sajous	291
Medical Gynecology. Dr. Howard A. Kelly.....	475

Obstetrics. Prof. J. W. Williams.....	214
Pediatrics, Golden Rules of. Dr. J. Lahorsky.	182
Sexual Instinct; Its use and danger. Dr. J. F. Scott	325
Surgical Therapeutics. Dr. E. Lamphear.....	440
Syphilis. Dr. Edw. L. Keyes.....	406
Textbook of Minor Surgery. Dr. E. M. Foote.....	356
Bradshaw, Dr. J. H. (O) Plea for more gentle wound manipulation	79
Bradycardia and Tachycardia. (BR).	
Brain, Abscess due to typhoid bacillus.....	426
Burke, Dr. J. Alkaloidal Medication.....	240
Burke, Dr. J. Treatment of Diabetes Insipidus.....	388
Burlington Co. Medical Society. See Societies.	

C

Camden City Dispensary	93
Camden County Society. See Societies.	
Cancer, Treatment of, by X-rays (O). Dr. G. E. Pfahler	339
Cancer, The Knife in.....	350, 396, 401
Cannaday, Dr. J. E. Some uses of iodine in surgical work	239
Cape May County Society. See Societies.	
Chambers, Dr. T. R. Improved yellow oxide of mercury	462
Chandler, Dr. W. J. (O). Hyoscine-morphine-cactin anaesthesia	272
Chandler, Dr. W. J. Discusses papers on the eruptive diseases	307
Chapin, Dr. H. D. (O). Epidemic paralysis in children	371
Children, Nervous diseases of	169
Children, Epidemic paralysis in	371
Clark, Dr. J. H. Discusses paper on State medical examinations and reciprocity	74
Clemenceau, Dr. George, Premier of France.....	426
Clinical Laboratory, Importance of the.....	278
College Physicians and Surgeons, N. Y. City, Increased requirements	468
Common Sense and the Baby (BR).....	250
Conference on Health—Health Boards.....	286
Conference on Medical Education	286
Congress, International, on Tuberculosis (E 434)	166
Consumption, Personal hygiene in prophylaxis and treatment. Dr. R. C. Newton.....	213, 309
Contract Practice	214
Conviction of Christian Scientist.....	305
Corbusier, Dr. H. D. Discusses paper on the eruptive diseases	305
Correspondence—	
Animal Experimentation. Dr. H. A. Kelly.....	436
Do Our Educational Methods need Correction? Dr. J. Tomlinson	212
Committee on Legislation. Dr. L. M. Halsey.....	212, 473
Change of Date Annual Meeting. Dr. D. Strock	401
Medical College Standing Temple College. Dr. J. W. Bennett	252
Medical Defense Committee Report. Dr. N. L. Wilson	321
Physician in Politics, The. Dr. D. Warman.....	361
St. Mary's Hospital, Rochester, Minn. Dr. E. W. Hedges	285
Corwin, Dr. T. W. Discusses paper on diet in pulmonary tuberculosis	154
Cossett, Dr. H. A. Discusses paper on laboratory methods of diagnosis	265
County Medical Society, The.....	393
County Medical Society. Dr. M. V. Ball's address	207
County Medical Societies—Excuses for non-attendance	207
Crank, Germs and Disease.....	279
Criticism of Medical College graduates. Dr. H. Beates	350
Crothers, Dr. T. D. The Alcoholic Problem.....	432
Cumberland Co. Medical Society. See Societies.	
Current Medical Literature—Brief Items—	
Abdominal Operations, Care of patient during	289
Aneurism, Subclavian	364
Appendicitis, Excited by a clove.....	217
Appendicitis, Acute, and acute salpingitis.....	218
Appendicitis and Pregnancy	323
Appendicular pain, acute and chronic.....	28

INDEX.

Appendix, Discharge of through rectum.....	217
Arthritis	437
Asphyxiated, The, irritation of epiglottis for..	28
Bleeding, Post-Menopausal	95
Buttermilk, Beneficial effects of	94
Cancer following Roentgen exposures.....	364
Cancer in children	403
Cancer researches into etiology of	289
Cancer, Transmissibility and Curability of ..	252
Cardiac physical signs, Bodily posture	290
Cerebrospinal meningitis, Cells in exudate of.	27
Childbirth after uterus had been cut off from	
central nervous system	323
Cholangitis and cholelithiasis	96
Collargol in septicemia, scarlet fever, etc.....	26
Colostomy, Lingual	474
Complications of pregnancy, labor and the	
puerperal state due to wandering spleen.....	27
Congenital Paludism	27
Congenital Weakness	181
Consumption, The after cure of	216
Cutaneous tuberculin reaction	437
Cysticercus cellulosa in child's tongue	26
Cystitis, Suppurative, Treatment and prog-	
nosis	439
Delirium Tremens, Treatment of	96
Diphtheria Antitoxin, Prevention of bad re-	
sults	252
Empyema	96, 363
Extrauterine pregnancy	180
Extrauterine pregnancy, living child	28
Eye Disease, Treatment of, by general prac-	
titioners	26
Eye Strain in school children	26
Gall-Stone Disease in its surgical aspect.....	438
Gastritis, Phlegmonous	363
Gastrointestinal cases, Obscure	475
Gastrojejunostomy, Physiological effects of..	288
Glasses, Yellow, for the eyes	95
Glaucoma, Importance of early recognition of.	289
Gynecology, Sins of omission and commission.	96
Herpes simplex, Significance of, in infectious	
diseases	290
Hodgkin's Disease, Mixed toxins in	404
Hysterectomy, Improved abdominal subtotal..	474
Intestinal intussusception	218
Kidney, Idiopathic, Hemorrhage from.....	384
Kidney, Loose, Choice of procedure	217
Labor, Ventral bandage during	363
Labor, Early rising after normal	405
McBurney's Point, Indirect production of	
typical pain at	323, 439
Modern Hospital, Criterion of	94
Mother's Health, Influence of on unborn child.	180
Nervous and mental disorders in school life,	
Prevention of	404
Neurasthenia, Mental origin of	475
Neurosis simulating gall-stone colic	253
Night sweats, phthisis, Treatment of	26
Nose-Drinking—Norway vice	474
Opsonin Index, Practical value of	216
Osculation, Is it harmful or wholesome?.....	95
Ovarian cyst, Multilocular, removed from an	
infant	96
Ozoena, Contagion of	252
Pancreatitis due to malignant growth in gall	
bladder	253
Placenta praevia, Frequency, mortality and	
treatment of	405
Pneumonia, Treatment of	252
Pregnancy and Syphilis	181
Pregnancy and Appendicitis	323
Pregnancy in heart disease	323
Puerperal Sepsis, Treatment of	437
Rectal feeding	95
Spasms and acute encephalitis of infants.....	403
Sprains	384
Sudden death at the Climacteric	27
Surgical suggestions—Amer. Jour. Surg.....	384
Syphilis and Cancer, Iodide potassium in ..	181
Syphilis in children	364
Syphilis inherited	438
Syphilis, Late, and pregnancy	181
Suppuration and gangrenous processes in the	
lungs, Operative treatment	438
Tabes, Inflammatory lesions of and pregnancy.	288
Tea as a beverage	363
Tubercle bacilli, Penetration of skin by	216
Tuberculosis, Pulmonary, 200 cases under san-	
atorium treatment	216
Tuberculosis, Permanent results of sanatorium	
treatment in	216
Tuberculosis Classes, Organization of	216
Tuberculous glands in the neck	216
Typhoid fever during pregnancy	218
Ulcers, Calcium iodide in	253
Unborn Child, Its care and rights	290
Urine, Unusual suppression of	95
Utero-Sacral short ligament, Sensitive	474
Valvular disease, Prevention of	404
Vertigo	27

D

Davis, Dr. H. H. Discusses paper on State	
medical examinations and interstate reci-	
procity	73
Death, Sudden, in early childhood. (O). Dr. Ar-	
thur Stern	340
Deaths—	
Bailey, Dr. Charles H., Bloomfield.....	325, 364
Baldwin, Dr. Aaron K., Newark.....	405
Banta, Dr. John H., Paterson	182
Closson, Dr. Albert L., Lambertville	254
Fayerman, Dr. Walter B., Petersburg, Va.....	254
Hardenberg, Dr. Daniel T., Jersey City.....	364
Johnson, Dr. John C., Blairstown.....	319, 365
Loomis, Dr. Henry P., New York City	325
McCauley, Dr. James D., Glenmore	254
MacWithey, Dr. E. L., Pompton Lakes.....	476
Parsell, Dr. Louis B., Closter	405, 440
Probasco, Dr. John B., Plainfield.....	359
Senn, Dr. Nicholas, Chicago, Ill.....	320
Shrady, Dr. George F., New York City.....	291
Stephens, Dr. David, New Brunswick	254
Stiger, Dr. J. Henry, Mendham.....	182
Townsend, Dr. Ellis P., Billings, Mont.....	254
Willis, Dr. Lillian A., Jersey City	254
Deaver, Dr. J. B. (O). The Surgical treatment	
of diseases of the gall bladder	224
Dermatology, Principles and Practice of (BR).	
Diabetes insipidus, Treatment of. Dr. J. Burke.	388
Dickinson, Dr. G. K. (O). Complications in	
disease conditions of the biliary system	194
Dickinson, Dr. G. K. (O). The Evolution of	
Associations, N. J. S. A.	275
Dickinson, Dr. G. K. Discusses paper on the	
Lymphatics	78
Dickinson, Dr. G. K. Discusses paper on Extra-	
uterine pregnancy	150
Diet in pulmonary tuberculosis. See Tubercu-	
losis.	
Dinner, Annual, of State Society, Pleasure Bay.	
Letters from Gov. E. C. Stokes, ex-President	
Grover Cleveland, Speeches by Dr. W. B.	
Johnson, Dr. James M. Green, Judge Chas.	
G. Garrison, Rev. H. M. Gessner, Dr. How-	
ard A. Kelly, Dr. E. Hollingshead and Dr.	
D. C. English	158
Diphtheria, Failure to report case	214
Diphtheria, Prophylactic use of antitoxin in ..	348
Diphtheria, Sudden death following use of anti-	
toxin in	390
Diseases of the nervous system (BR).	
Diseases of the rectum (BR).	
Doctor, The, and the druggist. (O). C. T. Mc-	
Closkey	459
Doctors—Why Unpopular?	312
Doctors, Dangers to, blackmail, etc.	315
Doctors vs. lawyers—ball game	94
Doctors in politics	353, 357, 361
Doty, Dr. A. H. Too sanitary here for great	
ravages of plagues	349
Duodenal and gastric ulcers, Dr. A. J. Ochsner.	389
Dyspnoea and cyanosis (BR).	

E

Early Life, Significance of abnormal stool in,	
(O). Dr. G. R. Pisek	17
Editorials—	
Closing Another Year	472
Do Our Educational Methods Need Correction?	172
Dr. Marcy on the Use of Alcohol	90
George F. Shrady, M. D.	320
Hearing on Vivisection Bill	397
Hospitals and Their Support	209
Influence of Medical Men on Legislation	471
Insurance Examiners' Fees	396
International Congress on Tuberculosis	434
John C. Johnson, M. D.	319
Looking Backward and Forward	317
Medical Education	360
Medical Men as Legislators	247
Memories of the Past	433
New Jersey Doctors Honored	92
New Jersey Sanitary Association	178
Nicholas Senn, M. D.	359
Osteopathic Bill No. 262	435
Our Annual Meeting	21, 433
Our Country and Our Society	358
Our Journal's Defects	435
Our Journal for Our Members	470
Our State Institutions	284
Reports of the Trenton Typhoid	247
State Board of Health	434
The American Medical Association	24, 470
The American Medical Editors' Association...	91
The Doctor's Chirography	470
The Knife in Cancer	396
The Next Annual Meeting	318
The 142d Annual Meeting	469
The Physician in Politics	283, 357

INDEX.

The Physician and the Medical Press	24	Hospital Opened, St. Peter's New Brunswick....	322
The Scientific Investigator Should Be Accu- rate	248	Hospital, Johns Hopkins, Report	437
The State Board of Health and the Hospital Epidemic	177	Hospital, St. Barnabas, Newark, Report	92
The State Tuberculosis Sanatorium	89	Hospitals, General Municipal, of Manhattan and the Bronx—Medical Administration of, Report Drs. Hallock, Janeway, etc.	421
The State Hospital for the Insane at Trenton..	175	Hudson County Society. See Societies.	
The Warfare Against Tuberculosis	210	Hunterdon County Society. See Societies.	
To Improve Our Journal	23	Hydrophobia and Hysteria, Effects of fear as a factor in	350
Training in Medical Organization	3.0	Hyoscine-Morphine-Cactin Anaesthesia. (O). Dr. W. J. Chandler	272
Typhoid Fever Epidemics	319		
Typhoid Fever in the State Hospital	92	I	
Typhoid Fever in the District of Columbia..	174		
Vivisection	359	Ill, Dr. Edward J. Discusses paper on extra- uterine pregnancy	149
Who Shall Decide When Scientific Men Differ?	248	Ill, Dr. Edward J. (C). Vivisection	399
		Ill, Dr. Edward J. Appendicitis described by the early writers	372
Education of children in relation to growth ...	168	Ill, Dr. Edward J. (C). The Knife in Cancer....	401
Educational methods needing correction (E) ..	172	Insane, Commitment of the	178
Educational methods needing correction. (C). Dr. Joseph Tomlinson	212	Internal Secretions and the Principles of Med- icine (BR).	
Endocarditis, Chronic, Diagnosis of, prior to disturbance of compensation. (O). Dr. L. G. Rowntree	332	Iodine, Some uses of, in surgical work	239
English, Dr. David C. See Editorials.		Is This Right? Life Insurance Examinations...	178
English, Dr. David C. Response to toast at Annual Dinner	165	J	
English, Dr. David E. Discusses Diet on pul- monary tuberculosis	154	Jacobi, Dr. A. Nihilism and Drugs	390
English, Dr. David E. Discusses papers on the eruptive diseases	304, 307	Johnson, Dr. W. B. Response to toast at An- nual Dinner	159
Essex County Medical Society. See Societies.		Johns Hopkins Hospital Report	437
Ether Anaesthesia, Use of adrenalin during ...	347		
		K	
F		Kelly, Dr. Howard A. (C). Animal Experi- mentation	436
Felty, Dr. J. C. Discusses paper on State med- ical examinations and Reciprocity	74	Kelly, Dr. Howard A. Response to toast at Annual Dinner	163
Fothergill, Dr. J. M. Education in relation to growth	168	Kidney, Loose, Case. Dr. R. T. Morris.....	345
Fracture of the head of the radius. (O). See Radius.		Kidney, Dislocated, Gall bladder trouble and appendicitis, Frequent interdependence of...	346
Francis, Dr. R. P. (O). The medical inspection of schools	367	Kidney, Rupture of, case	426
		L	
G		Laboratory Methods of Diagnosis; How far may the general practitioner employ and benefit from, (O). Dr. R. N. Willson	260
Gall Bladder, Etiology and pathology of dis- eases of, (O). Dr. H. G. Norton	183	Laboratory Methods, Modern, for the Practi- tioner, Value of, (O). Dr. F. C. Wood	443
Gall Bladder, Medical treatment of diseases of, (O). Dr. J. H. Musser	221	Lampson, Dr. M. Discusses paper on State med- ical examinations and reciprocity	72
Gall Bladder, Surgical treatment of diseases of, (O). Dr. J. B. Deaver	224	Legislation against Tobacco	391
Gall-Stone Disease, Diagnosis of, (O). Dr. P. A. Harris	184	Legislation, Committee on. See Correspond- ence.	
(See Biliary System, Complications in disease conditions of, page 194.)		Leucocytic Count. The Value of, as a Diag- nostic Aid. (O). Dr. J. W. Martindale.....	329
Garrison, Judge. Response to toast on Expert Testimony, at the Annual Dinner	160	Life Insurance Examination Fees. (E).....	178, 396
Gastric and duodenal ulcers. Dr. A. J. Ochsner.	389	Life Insurance Examination, Action Kentucky State Association	282
Gessner, Rev. H. M. Response to toast at An- nual Dinner	161	Lippincott, Dr. A. H. (O). President's Address, Camden Co. Medical Society	385
Gloucester County Society. See Societies.		Luke, the Physician. Dr. Harnack	315
Godfrey, Dr. E. L. B. (O). The Legality of State medical examinations and Reciprocity in Interstate medical licensure	63	Lymphatics, Some Remarks on the, (O). Dr. E. Z. Hawkes	74
Gonorrhoea, Diagnosis and treatment of, (BR).		Lyon, Dr. S. B. Medical Testimony, Abstract...	314
Gray, Dr. Frank D. (C). Vivisection	400		
Gray, Dr. Thomas N. Common Sense and the Baby. (BR).		Mc	
Green, Prof. J. M. Response to toast at An- nual Dinner	159	McAlister, Dr. Alex. (O). Rotheln	299
		McCloskey, C. J., Phar. (O). The Doctor and the Druggist	459
H		McGrath, Dr. J. J. (O). Classification of Cases of Appendicitis	380
Hagarty, Dr. J. F. An unusual obstetric case..	344		
Halsey, Dr. L. M. (C). Reports Committee on Legislation	251, 473	M	
Hance, Dr. I. W. (O). Sanatoria; their advan- tages and limitations	199	Malpractice Alleged, Suit, Acquittal of, Presi- dent State Medical Society	350
Harris, Dr. P. A. (O). Diagnosis of Gall-Stone Disease	184	Manges, Dr. Morris. Oration on Medicine, The Physician and the Medical Press	12
Harris, Dr. P. A. Discusses papers on extra- uterine pregnancy	149	Marcy, Dr. Alex., Jr., President's Address, The Relations, Responsibilities and Duties of the Medical Profession	1
Harris, Dr. P. A. Discusses papers on gall-blad- der diseases	231	Marcy, Dr. Alex. Jr. Discusses paper on Labo- ratory Methods of Diagnosis	264
Hawkes, Dr. E. Z. (O). Some Remarks on the Lymphatics	74	Marriages—	
Health Officers and Sanitary Inspectors Licensed	98	Halsted, Dr. Charles F.	324
Hedges, Dr. E. W. Discusses papers on dis- eases of the gall bladder	227	Hayward, Dr. Theodore	254
Hedges, Dr. E. W. (C). St. Mary's Hospital, Rochester, Minn.	285	Riggans, Dr. Edward N.	254
Heineck, Dr. A. P. (O). Surgical Treatment of Exophthalmic Goitre	418	Russell, Dr. Charles B.	254
Heredity, The proper direction of the Forces of, (O). Dr. W. A. Wescott	307	Thomas, Dr. F. Ashley	324
Hicks, Dr. W. H. Retention in Essex Asylum as Assistant Superintendent	319 (E), 321	Martindale, Dr. J. W. (O). Value of the Leuco- cytic Count as a Diagnostic Aid	329
Hollingshead, Dr. E. Response to toast at an- nual dinner	164	Martindale, Dr. J. W. (O). Premature Separa- tion of the Placenta	154
Home for Incurables, The F. E. Parker.....	321	Marvel, Dr. Emery. Discusses paper on the Lymphatics	78

INDEX.

Marvel, Dr. Emery. Discusses paper on Extra-uterine Pregnancy	150
Marvel, Dr. Emery. Discusses paper on Diseases of the Gall Bladder	229
Marvel, Dr. Emery. Discusses paper on Laboratory Methods of Diagnosis	265
Marvel, Dr. Emery. Prevention of peritoneal adhesions	166
Marvel, Dr. Philip. (O). Measles	295
Marvel, Dr. Philip. Paroxysmal Tachycardia	166
Marvel, Dr. Philip. Discusses paper on Diseases of the Gall Bladder	230
Marvel, Dr. Philip. Discusses papers on the Eruptive Diseases	306
Measles. (O). Eruptive Diseases Symposium. Dr. Philip Marvel	295
Medical College Graduates, Deficient Education of	350
Medical Defense, Report of Committee on,	121
Medical Defense, Wisconsin State Society Action	312
Medical Defense. (C). Dr. N. L. Wilson	321
Medical Education, Council on, A. M. A.	432
Medical Education, Increased Medical College Admission Requirements	468
Medical Editors' Association, American (E 91) ..	87
Medical Expert Testimony	20
Medical Examiners, Life Insurance (E)	178
Medical Fund for the Poor, San Diego	356
Medical Gynecology. Dr. H. A. Kelly (BR) ..	
Medical Inspection of Schools. (O). Dr. R. P. Francis	367
Medical Inspection of Schools	167
Medical Inspection of School Children	206
Medical Law in Illinois	321
Medical Law in New York State	200
Medical Lectures	285
Medical Organization, Training in, (E)	360
Medical Profession, Relations, Responsibilities and Duties of, (O). Dr. Alex. Marcy, Jr.	1
Medical Schools and the U. S. Pharmacopoeia ..	393
Medical Societies. See Societies.	
Medical Testimony, Abstract of paper by Dr. S. B. Lyon	314
Mercury, Yellow Oxide, Ointment of. Dr. T. R. Chambers	462
Middlesex County Society. See Societies.	
Milk Commissions, American Ass'n of	88
Minor Surgery, Textbook of, (BR) ..	
Mitchell, Dr. H. Typhoid Fever in Trenton State Hospital	208
Mitchell, Dr. H. Discusses paper on the Eruptive Diseases	305
Monmouth County Society. See Societies.	
Morbid Psychology. Dr. F. Peterson. See Psychology.	
Morris, Dr. R. T. Loose Kidney, Case of	345
Motor Omnibus, Dangers of the	170
Musser, Dr. J. H. (O). The Medical Treatment of Diseases of the Gall Bladder	221

N

Nelson, Prof. Julius. (C). Vivisection	400
New Jersey Doctors Honored (E)	92
New Jersey Sanitary Association. See Societies.	
Newton, Dr. R. C. Personal Hygiene in the prophylaxis and treatment of consumption. Abstract	166
Nihilism and Drugs. Dr. A. Jacobi	390
Noble, Dr. Chas. P. Discusses paper on premature separation of the placenta	156
Noble, Dr. Chas. P. Discusses paper on Diseases of the Gall Bladder	228
Norton, Dr. H. G. (O). Etiology and Pathology of Diseases of the Gall Bladder	183
Nostrums and Patent Medicines	167

O

Obstetric Anomaly, An extra fontanelle	463
Obstetric Case, Unusual. Dr. J. F. Hagerty ..	344
Obstetrics (BR) ..	
Ocean County Society. See Societies.	
Ochsner, Dr. A. J. Duodenal and Gastric Ulcers ..	389
Operations, Authority to perform	170
Operations, Right to collect fee on oral promise of third party	170
Oral Cavity, The Hygiene of the, (O). Dr. H. H. Sherk	342
Oration on Medicine, The Physician and the Medical Press. Dr. Morris Manges	12
Oration on Surgery, Four Decades of American Surgery. Dr. Albert Vander Veer	5
Osteopathic Bill, Gov. Stuart's (Pa.) Veto Message	204
Osteopathic Bill, The. (C). Dr. N. L. Wilson ..	436
Osteopathic Bill, The. (E)	435
Osteopathic Bill. (C). Hearing on, before Legislative Committee. Dr. L. M. Halsey.	473
Osteopathy, A lay journal's view of	394, 467

Osteopathy, The "Science" of	94
Our Annual Meeting. (E)	21, 433
Our Country and Our Society. (E)	358
Our Journal's Defects. (E)	435
Our Journal for Our Members (E)	470
Our State Institutions. (E)	284

P

Paganelli, Dr. T. R. (O). Trichiasis	454
Pancreatitis from gall-stone disease	463
Paralysis, Epidemic, in Children. (O). Dr. H. D. Chapin	371
Passaic County Society. See Societies.	
Pediatrics, Golden Rules of, (BR) ..	
Peritoneal Adhesions, Prevention of	166
Peterson, Dr. Fred. (O). A Talk on Morbid Psychology	407
Pfahler, Dr. G. E. (O). Treatment of Cancer by X Ray	339
Pharmacopoeia, U. S. and Medical Schools	393
Pharmacopoeias, Uniformity in	171
Physical reconstruction of school children ..	316
Physician, The, and the Pharmacist, Relations to the U. S. P. (O). W. C. Anderson, Phar. D.	456
Physicians, Longevity of	394
Physicians form a Union	432
Pinneo, Dr. F. W. Discusses paper on the Eruptive Diseases	304
Pisek, Dr. G. R. (O). The Significance of Abnormal Stools in Early Life	17
Placenta, Premature Separation of the, (O). Dr. J. W. Martindale	154
Pneumonia, Etiology, pathology, symptoms and treatment of, (O). Dr. E. W. Sprague	266
Politics, The Doctor in	353
Politics, The Church in	353
Politics. See pages 247, 283, 357, 361, 471.	
Practice of Medicine, Amending Illinois and South Carolina Acts	321, 467
Practice of Medicine, Law regulating in U. S.—New Jersey	280
Practice of Medicine—Missouri Act	214
Practice of Medicine—New York State Law regulating	200
President's Address—Relations, Responsibilities and Duties of the Medical Profession. Dr. A. Marcy, Jr.	1
President's Address—Camden County Medical Society. Dr. A. H. Lippincott	385
Preventive Medicine the Medicine of the Future	241
Prize Essays for 1908. Notice and Conditions of Award	250
Proprietary Preparations, Approved by A. M. A. Council	30, 98, 219, 292, 327, 441
Psychology, Morbid, A Talk on. (O). Dr. Fred. Peterson	407
Puerperal Sepsis treated by Vaccines—Two Cases	427

R

Radius, Fracture of the Head of—two cases. (O). Dr. Chas. F. Baker	415
Reciprocity in Interstate Licensure, etc. (O). Dr. E. L. B. Godfrey	63
Rector, Dr. J. M. Discusses paper on Extra-uterine Pregnancy	150
Report Johns Hopkins Hospital	437
(See also Societies and Transactions.)	
Rotheln. (O). Dr. Alex. McAlister	299
Rowntree, Dr. L. G. (O). Diagnosis of Chronic Endocarditis prior to Disturbance in Compensation	332
Rush, Dr. Benjamin, A letter by, in 1810	322

S

Salem County Society. See Societies.	
Sanatoria, Their Advantages and Limitations. (O). Dr. I. H. Hance	199
Sanatoria, Incipency in Tuberculosis from the Standpoint of the, (O). Dr. H. B. Dunham ..	373
Sanatorium, State Tuberculosis, Appointment of Superintendent	212
Sanatorium, State, Opening, October, 1907 ..	287
Sanatorium, State, (E)	80, 284
Sanitary Conditions here preventive of great ravages of "Plagues." Dr. A. H. Doty	349
Scarlet Fever. (O). Dr. Hiram Williams	293
School Children, Eyeglasses for	169
School Children, Medical Inspection of	206
School Children, Nervous diseases of	169
School Children, New hysterical condition among	169
School Children, Reconstruction of, by fresh air	316
Schools—Medical Inspection of, (O). Dr. R. P. Francis	367
Schools—Medical Inspection of	167

INDEX.

Scripture, Dr. E. W. (O). Stammering and Stuttering, Abstract	425
Senseman, Dr. Theo. (O). Diet in Pulmonary Tuberculosis	151
Sexual Instinct; Its Use and Dangers. (BR). Sherk, Dr. H. H. (O). Premature Separation of the Placenta	156
Sherk, Dr. H. H. (O). The Hygiene of the Oral Cavity	342
Silvers, Dr. E. B. Discusses paper on the Eruptive Diseases	304
Sins of Omission and Commission in Gynecology	96
Smallpox. (O). Dr. Edward E. Worl	310
Smoke Nuisance Award	356
SOCIETIES, Medical Organizations, Etc.	
International Congress for the Protection of Infant Life	393
International Congress for Medical Electrol-ogy and Radiology	430
International Tuberculosis Congress (E 434) 286, 430	
International Tuberculosis Congress Prizes Offered	430
Pan-American Medical Congress, Fifth	430
American Academy of Medicine	467
American Association of Milk Commissions... ..	88
American Medical Association (24 E)	470
American Medical Association—New Members from New Jersey	20, 212, 320, 394, 432
American Medical Editors' Ass'n. (E 87, 91),	467
American Public Health Association	246
Medical Society of New Jersey. See Trans- actions.	
New Jersey Sanitary Association.	88, 178, 250, 275, 335
Society for the Relief of Widows and Orphans of Medical Men of New Jersey	356, 394, 432
State Medical Society of Pennsylvania	242
Component (County) Medical Societies—	
Atlantic County	79, 391
Bergen County	79, 356
Burlington County	19, 80, 281
Camden County	81, 244, 315, 392, 395
Cape May County—State Society Meetings,	117, 395, 469
Cumberland County	86, 245, 354, 464
Essex County	19, 82
Gloucester County	84, 316, 354, 429
Hudson County	244, 355, 392, 465
Mercer County	84, 355, 466
Middlesex County	245, 356, 466
Morris County	429
Ocean County	85, 282
Passaic County	85, 282, 429
Salem County	85, 282, 429
Somerset County	466
Sussex County	19, 85
Union County	86
Tri-County—Morris-Sussex-Warren	245
Local Societies—	
Newark Medical League	320, 361, 429
Medical Society of Westfield	282
Physicians' Protective Ass'n, Woodbury	429
State Board of Health (E)	434
State Board and Local Boards—Conference	250
State Board Monthly Statements,	28, 97, 182, 218, 254, 290, 326, 366, 406, 441, 476
State Hospital for the Insane, Trenton,	(E175, 247), 171, 208
State Hospital—Dr. H. A. Cotton appointed Medical Director	246
State Board of Medical Examiners	88
State Tuberculosis Sanatorium (E89)	287
State Village for Epileptics	92, 284
Spondylitis Tuberculosis, Treatment of. Dr. A. C. Weiner	387
Sprague, Dr. E. W. (O). Pneumonia; Its Eti- ology, pathology, symptoms and treatment..	266
Splanchnic Neurasthenia—"The Blues." (BR). Stammering and Stuttering, Treatment of. Dr. E. W. Scripture	425
State Institutions, Criticisms of, in Daily Press,	93
State Medical Examinations, Legality of, and Reciprocity in Interstate Medical Licensure. (O). Dr. E. L. B. Godfrey	63
Stern, Dr. Arthur. (O). Sudden Death in Early Childhood	340
Stools, Abnormal, Significance of, in Early Life. (O). Dr. G. R. Pisek	17
Strock, Dr. D. (O). Tetanus and Antitetanic Treatment	193
Strock, Dr. D., on the State Society Journal	467
Substitution in Prescription Compounding	213
Sudden Death at the Climacteric	27
Sudden Death following use of diphtheria anti- toxin	390
Sudden Death in Early Childhood. (O). Dr. A. Stern	340
Surgery—Four Decades of American, (O). Dr. A. Vander Veer	5
Surgery, Textbook of Minor, (BR)	
Surgical Shock, Significance of Blood Pressure in, (O). Dr. A. J. Walschied	232
Surgical Therapeutics. (BR)	
Sussex County Society. See Societies.	
T	
Tachycardia, Paroxysmal. Dr. Philip Marvel	166
Tetanus and Antitetanic Treatment. (O). Dr. D. Strock	196
The Physician and the Medical Press. Oration on Medicine. Dr. Morris Manges	12
Therapeutic Notes	179, 362, 462
Toxins and Antitoxins. (O). Dr. B. A. Wad- dington	255
Transactions of State Soc'y—House of Delegates.	
Alternate delegates appointed by President— Camden, Hudson, Passaic, Somerset	103, 104, 113
Amendments to By-Laws—	
Annual Dues of Component Society Members to be sent two weeks before beginning of fiscal year	124
Annual Dues of new Members elected before Dec. 1., \$2; after Dec. 1., \$1.	124
Delinquency of Component Societies caus- ing suspension	101, 113, 124
Fiscal year hereafter to begin June 1st.	113, 124
No Member in good standing in Component Society until State Soc'y dues are paid.	113, 124
Twenty Members instead of twenty Annual Delegates to constitute a quorum.	113, 124
Annual Dues to be sent to Treasurer through Recording Secretary—Resolution	124
Annual meeting, 1908, ordered at Cape May, June 23-25. (Time changed by Board of Trustees to June 18-20, page 395)	117
Honorary Member elected—Albert Vander Veer, M. D., Albany, N. Y.	104
Invocation by Rev. Dr. G. L. Dobbins	108
Medical Defense, Report of Committee, Action deferred until 1908	123, 124
Minutes of last Annual Meeting Approved	103
Nominating Committee appointed	108
Nominating Committee Report	116
Permanent Delegates Elected—	
Cumberland County—Dr. Ellsmore Stites.	109
Hudson County—Drs. Samuel A. Helfer, John C. Parsons	109
Morris County—Dr. James Douglas, rein- stated	116
Permanent Delegate resigning causes a va- cancy which the Component Society to which he belonged may fill	109
Permanent Delegate—Dr. W. B. Johnson, Pas- saic, resigned	113
Prizes offered for Essays—\$100 and \$50 (medal) ..	113
Quorum changed to twenty Members instead of twenty Annual Delegates	113, 124
Report of Delegate, Dr. Mary E. Gaston, to the Medical and Chirurgical Faculty of Maryland	107
Reports of Officers—	
Dr. W. J. Chandler, Recording Secretary	109
Dr. Archibald Mercer, Treasurer	111
Dr. Chas. J. Kipp, Board of Trustees	112
Dr. Philip Marvel, Judicial Council	115
Reports of Committees—	
On Arrangements—Dr. P. M. Mecray	103
On Credentials—Dr. D. Strock	101
On Honorary Membership—Dr. H. Genet Taylor	104
On Hygiene and Legislation—Dr. L. M. Halsey	117
On Medical Defense—Dr. W. G. Schauffler	121
On Prize Essay—Dr. Chas. J. Kipp	108
On Program—Dr. W. J. Chandler	104
On Publication—Dr. W. J. Chandler	106
On Scientific Work—Dr. N. L. Wilson	105
Telegram of appreciation of services rendered and sympathy in illness sent to Senator J. S. Frelinghuysen	107
Welcome of Society to Long Branch by Mayor McFadden	108
Trenton Hospital and Dr. J. W. Ward, from Salem Sunbeam, etc.	171
Trichiasis. (O). Dr. T. R. Paganelli	454
Tuberculosis, Incipient, from the Standpoint of Sanatoria. (O). Dr. H. B. Dunham	373
Tuberculosis, International Congress on. Dr. Flick	242
Tuberculosis, International Congress, Washing- ton, D. C., 1908	286
Tuberculosis, Pulmonary, Diet in, (O). Dr. Theo. Senseman	151

INDEX.

Tuberculosis Sanatorium, State, appointment of Superintendent	212
Tuberculosis, The Warfare against, (E)	210
Tuberculous, Denver Bars the	213
Typhoid Fever Epidemic, Trenton State Hospital. Dr. Mitchell	208
Typhoid Fever in State Hospital, Trenton, (E 92, 175, 177, 247), 93, 241	
Typhoid Fever in District of Columbia. (E)	174

U

Ulcers, Duodenal, and Gastric. Dr. A. J. Ochsner	389
United States Pharmacopoeia and the Medical Schools	393
United States Pharmacopoeia, Relations of physician and pharmacist to	456
United States Pharmacopoeias, Uniformity in... ..	171

V

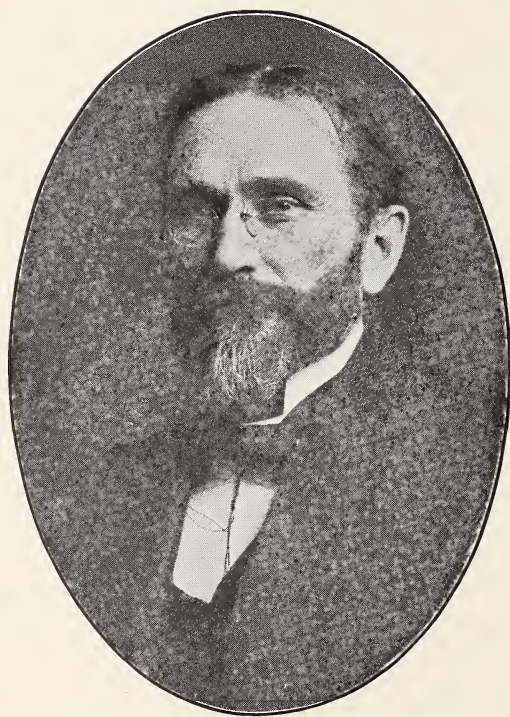
Value of the Leucocytic Count as a Diagnostic Aid. (O). Dr. J. W. Martindale	329
Vander Veer, Dr. Albert. (O). Four Decades of American Surgery	5
Vander Veer, Dr. Albert. Discusses paper on Diseases of Gall Bladder	229
Vivisection—Bill No. 118	399
Vivisection—Hearing on Bill led by Dr. E. J. Ill.	397
Vivisection—Its Abuses. N. Y. State Bill.....	352
Vivisection. (C). Dr. John G. Curtis.....	399
Vivisection. (C). Dr. F. D. Gray	400
Vivisection. (C). Dr. H. A. Kelly.....	436
Vivisection. (C). Prof. Julius Nelson.....	400
Vivisection. (E).	359, 395, 397, 398

W

Waddington, Dr. B. A. (O). Toxins and Antitoxins	255
Wallhauser, Dr. H. J. F. Discusses paper on the Eruptive Diseases	302
Walschied, Dr. A. J. (O). Significance of Blood Pressure in surgical Shock	232
Warman, Dr. David. (C). The Physician in Politics	361
Watson, Dr. W. P. Discusses paper on State Medical Examinations and Reciprocity	71
Wescott, Dr. W. A. (O). The Proper Direction of the Forces of Heredity	307
Williams, Dr. Hiram. (O). Scarlet Fever.....	293
Williams, Dr. Hiram. Discusses papers on the Eruptive Diseases	307
Willson, Dr. R. N. (O). Laboratory Methods of Diagnosis, Benefits of, to general practitioners	230
Wilson, Dr. Norton L. (C). Medical Defense... ..	321
Wilson, Dr. Norton L. The Osteopathic Bill....	436
Wilson, Dr. N. L. Discusses paper on the Lymphatics	78
Wood, Dr. F. C. (O). Value of Modern Laboratory Methods for Practitioners	443
Worl, Dr. Edw. E. (O). Smallpox	300
Worl, Dr. E. E. Discusses paper on State Medical Examinations and Reciprocity	73
Worl, Dr. E. E. Discusses papers on the Eruptive Diseases	307
Wound Manipulation, Plea for more gentle. Dr. J. H. Bradshaw	79

Y

Young, Dr. Charles. Discusses paper on the Lymphatics	77
-------------------------------------------------------------	----



Edward J. M.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 1.

ORANGE, N. J., JULY, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

PRESIDENT'S ADDRESS.*

The Relations, Responsibilities and Duties of the Medical Profession.

By Alexander Marcy, Jr., M. D.,
Riverton, N. J.

It is a great honor to preside over the deliberations of this distinguished body of medical men, this Society being one of the oldest, as well as one of the most progressive in the country, whose past history is crowned with honor; whose present is alive in its constant endeavor to improve the personnel of its members, as well as to help in the great crusade which our profession is ever waging against disease and death; whose future is brilliant with possibilities and glorious in opportunities. I am deeply conscious of the weight of responsibility resting on me at this time. What has been accomplished for the good of the Society, and for the advancement of its best interests during the past year, has been due to the active coöperation of all its officers and members rather than to any special efforts of my own. What we have failed to do, however, I attribute largely to my own shortcomings. I hope you will not deal harshly with me on this account, believing that I have been actuated by a desire to promote the best interests of the Society, and that I have tried to discharge my duty to you honestly and faithfully. May I ask your indulgence for a short time, in order that I may speak to you of a few things, which seem to me of sufficient importance

to warrant my calling your attention to them.

First, let me ask—How can we elevate the standing of the medical profession in the community; second—What is its moral responsibility; and third—What is its duty regarding some of the great evils which threaten our body politic. Gentlemen, these are pertinent questions, and in a peculiar sense are correlated, and at this time, more perhaps than at any other in the history of medicine, are demanding solution.

In attempting to elevate and improve the standing of the profession in the community, we must first of all see to it that only the best young men are permitted to begin the study of medicine, and in order to accomplish that it will be necessary to raise the entrance requirements so high that only those who are especially fitted can begin. Such requirements as are demanded of all students who wish to matriculate at Harvard, Johns Hopkins, or the University of Pennsylvania. This will permit only men thoroughly qualified to enter the threshold of the profession.

A four years' course of medical study, followed by a year of practical training in the wards of a general hospital, or a year of special clinical work should be required before the degree of M. D. is conferred. An examination by a regularly constituted board of medical examiners, who will grant the right to practice. This would reduce the number somewhat perhaps, but it would encourage only the very best men to enter upon the study of medicine, and the ranks of the profession, instead of being overcrowded by men who are incompetent, would be sufficiently full of men of the highest attainments. But more than this,

*Delivered at the 141st annual meeting of the Medical Society of New Jersey, June 26, 1907.

after these elect individuals have been licensed to practice medicine, how can we guarantee that they will continue to be fit to practice it. I am of the opinion that this can be done only through a comprehensive system of post-graduate work and study, with a re-examination once in five years by the licensing board, who will determine their fitness to continue in practice. You are all aware of the fact that mediocrity is the rule, and not the exception in our profession, and why is it so? It is because many are not properly prepared to begin the study of medicine, they are not properly taught after they have begun, and they do not pursue any proper course of post-graduate work or study, and it is to this latter course, more perhaps than to any other, that the profession, in this country at least, does not occupy the standing in the community that it should. This is a reproach upon the fair name of our profession, as well as a crime against humanity, and something must be done to overcome it. The particular thought that I wish to *emphasize* is the necessity of a comprehensive plan of *post-graduate* work and study. Each component society should become a center of this kind of work. Each councillor district should be responsible for the societies under its care, and the State Society should have a standing committee, whose duty it should be to see that a regular systematic course of study is planned and arranged for, which should be submitted to the Society at the annual meeting, adopted, and the Councillors instructed to see that it is carried out. Some such plan as this I think would place our profession on a higher plane, greatly improve its personnel and prove a potent factor in improving its standing in the community.

That there is a moral responsibility resting upon our profession none of you I think will deny, and this should be as binding on us as that which the law compels. This should govern all our actions, both in our relations with one another and with our patients.

Some one has said, "The physician in the practice of his profession exercises a more immediate, direct and far-reaching influence on the existence and happiness of mankind than is given to any other individual," therefore there rests on him a moral responsibility which is as great, if not of greater importance than the responsibility resting on him in connection with his treatment of disease.

If it be of the greatest importance that we should be thoroughly well equipped for the

practice of our profession, in the sense that we should be well educated and thoroughly trained men in the science and art of medicine, is it not just as important, yea, even more important, that we should be well developed morally, with the highest ideals and a character above reproach?—marked men in the community, whose life and example are as nearly perfect as it is possible for finite man to attain to. The highest and best type of manhood must be the moral and religious one, and in order to develop the moral side of our character it is absolutely necessary that we cultivate the spiritual, therefore we must accept the Christian religion as the very basis of our endeavor. Religion is a fact in human nature, and it has been said that "when-ever and wherever we find man, we find him groping after some unseen power; he appears as a voyager between life and death, conscious of the mystery in which his voyage begins and the tragedy in which it ends." Religion in man is of all things the most important factor, the great determinative force which has aided and secured the present high standard of morality, and it is to this same moral force that we must attribute our advancement throughout all the ages. Religion is essential to the best endeavor of the human mind, and no matter to what heights of intellectual development men may attain, or honor they may gain, their highest and best achievement can be best secured when they recognize and acknowledge the truth of the Christian religion and practice its precepts. There is no antagonism between science and religion, one being the handmaid of the other. Some of our greatest scientists have also been our most devoted Christian men, and their lives have been shining examples of the possibilities of the combined forces in producing the highest type of man. To what class of men is religion of greater importance than to medical men, and who is there that can exercise the same uplifting influence on the lives and character of the people as they go in and out among them. Ours, gentlemen, is a sacred calling, and we must recognize the necessity of right living and right thinking if we would attain to the highest sphere of usefulness in our respective communities, and accomplish all that we should for suffering humanity. Great as is the privilege of administering to and relieving physical suffering, of improving and prolonging human life, of preventing disease, and staying the hand of death, great as is this privilege, I say, it is noth-

ing as compared with the inestimable privilege of administering to the spiritual needs of fallen humanity and pointing the way to a better life physically and a higher life morally and spiritually. One the complement of the other.

Of our duty toward some of the great evils which threaten our body politic, I will consider but two, which I consider the most important. First, that greatest of all evils, that curse of humanity, intemperance. I think you will all agree with the statement that the greatest evil that menaces the human race to-day is intemperance, and by this I mean the intemperate use of alcohol. It is not my purpose to discuss the effects of alcohol on the human system, nor to attempt to settle the controversy as to whether alcohol is a food or not, I simply wish to raise my voice in protest against the use of alcohol either as a beverage or as a medicine. I take from *The Lancet* (London) an expression of scientific opinion by some eminent medical men:—

"In view of the statements frequently made as to present medical opinion regarding alcohol and alcoholic beverages, we, the undersigned, think it desirable to issue the following short statement on the subject—a statement which we believe represents the opinions of the leading clinical teachers as well as of the great majority of medical practitioners.

"Recognizing that, in prescribing alcohol, the requirements of the individual must be the governing rule, we are convinced of the correctness of the opinion so long and generally held, that in disease alcohol is a rapid and trustworthy restorative. In many cases it may be truly described as life-preserving, owing to its power to sustain cardiac and nervous energy, while protecting the wasting nitrogenous tissues.

"As an article of diet we hold that the universal belief of civilized mankind that the moderate use of alcoholic beverages is, for adults, usually beneficial, is amply justified.

"We deplore the evils arising from the abuse of alcoholic beverages. But it is obvious that there is nothing, however beneficial, which does not by excess become injurious."

T. McCall Anderson, M. D., Regius Professor of Medicine, University of Glasgow; Alfred G. Barrs; William H. Bennett, K. C. V. O., F. R. C. S.; James Crichton-Browne; W. E. Dixon; Dyce Duckworth, M. D., LL. D.; Thomas R. Fraser, M. D., F. R. S.; T. R. Glynn; W. R. Gowers, M. D., F. R. S.; W. D. Halliburton, M. D., LL. D.; F. R. C. P., F. R. S., Professor of Physiology, King's College, London; Jonathan Hutchinson; Robert Hutchison; Edmund Owen, LL. D., F. R. C. S.; P. H. Pye-Smith; Fred T. Roberts, M. D., B. Sc., F. R. C. S.; Edgcombe Venning, F. R. C. S.

I am perfectly willing to admit that under certain circumstances, alcohol may be beneficial when used in a legitimate way, but I would also add that it has done so much more harm than good, that I for one would be very glad to see it entirely ban-

ished from our list of remedies. The abuse of alcohol has produced so much suffering and misery, so many criminals and degenerates, and has cost so much, both in human life and in money, that one wonders how the State can enter into partnership with these traffickers in human lives, these producers of suffering and sorrow, to the extent of granting them permission to establish and continue their death dealing business. It seems to me to be little less than criminal, for any legislative body to legalize the manufacture and sale of any alcoholic product as a beverage, and the paltry sum of money received from such a source is expended many times over in taking care of the criminals, the paupers, and the degenerates that are produced by the use or abuse of alcohol. Apropos of this question of granting licenses to sell intoxicating liquors, Judge Artman, in an opinion handed down recently, in the Boone Circuit Court, at Lebanon, Indiana, says: "In view of these holdings, based as they certainly are upon good reason and sound common sense, it must be held that the State can not under the guise of a license, delegate to the saloon business a legal existence, because to hold that it can is to hold that the State may sell and delegate the right to make widows and orphans, the right to break up homes, the right to make murderers, the right to produce idiots and lunatics, the right to fill orphanages, poor houses, insane asylums, jails and penitentiaries and the right to furnish subjects for the hangman's gallows. With a due appreciation of the responsibilities of the occasion, conscious of my obligations, under my oath to Almighty God and to my fellow-man, I cannot, by a judgment of this court, authorize the granting of a saloon license." Judge Ira W. Christian, in the Hamilton County Court at Noblesville, Indiana, in a decision not less exhaustive than that rendered by Judge Artman, not only arrived at the conclusion that a saloon license is unconstitutional, but went a step farther and by citing decision after decision previously rendered in point, summed up as follows: "I am drawn to the inevitable conclusion that the business of selling intoxicating liquors at retail to be drunk on the premises where sold is dangerous to the public morals, the public safety, the public health, and that therefore the place where such business is conducted is *per se* a nuisance, and needs no proof as to its injurious effects upon the public."

It is my belief that there is a very great responsibility resting on our profession re-

garding this great evil, and it is our duty to discourage in every way that we can the use of it. I also think that we should use our best efforts to create a sentiment among the people against its use, pointing out to them its injurious effects on the tissues of the body, as well as its demoralizing effect upon the character. Inasmuch as the State aids and abets this pernicious traffic, by granting the privilege to manufacture and sell it, I believe that the State should not only care for the criminals, the paupers, and the degenerates, that it helps to produce, but it should also be responsible for the widows and orphans, as well as the mothers and children, who may become dependent, and many of whom suffer untold hardship in consequence of it. But more than this, I believe that it is the duty of the State to establish and conduct an asylum for the treatment and care of inebriates, to which any one addicted to the intemperate use of alcoholic stimulants, or narcotic drugs, could be committed and confined until such time as in the judgment of the officers of the institution they were fit to be allowed to return to society.

I would suggest to our Legislative Committee that they take this matter up, and if the way seems clear, that they prepare a bill to be introduced into the Legislature providing for the establishment of a State Asylum for Inebriates, as well as for the users of narcotic drugs, and providing that all those who use intoxicants habitually to excess, or who are addicted to the use of narcotic drugs, to a degree that incapacitates them from attending to their usual occupations, shall be committed and remain as inmates until they are cured of the habit.

The second evil of which I wish to speak is that crime against society and humanity—foeticide. There is an alarming increase in the number of intentional abortions, and unless the State takes some active measure to prevent it, the results will be most disastrous to the future well-being of our State and country. I recently had under my care at one time, three women, one the wife of a clergyman, one the wife of a successful business man, and one the wife of a prosperous laboring man. Each of them had committed an abortion, with malice aforethought. Their only excuse was that they did not intend to have any more children; two of them had two children each, the other had but one. No doubt all of you have had such cases in your practice. Such conditions as these are disgraceful, and reveal a pitiable state of the public conscience,

as well as a moral tone much below what it should be. Now, what is our duty toward this great evil, and how can we help to overcome it? First, we must try and awaken the public conscience to a realization of the national peril and disgrace which such practices are bound to produce; then we must aid the State by suggesting legislative action which will more effectively control and prevent it.

It will be necessary for our legislative bodies to frame and enact laws that will make such a thing as this a crime, punishable by severe penalties; true, you can not compel people to be good by legislation, but you can punish them for being bad, and this must be one of the capital crimes and classed among such as manslaughter, infanticide, etc., and punished in the same way. Such a law should be inquisitorial, and every medical man should be compelled to report all cases of abortion to the prosecuting attorney, whose duty it should be to investigate every such case, and, should any evidence be found of the abortion having been purposely produced, then the person or persons who were implicated should be dealt with in accordance with the statute. Aside from the moral and legal questions involved, this matter is important from the standpoint of sociology. It is a patent fact that there is a growing tendency toward the extinction of our native-born American families, and the question of race suicide, not alone from this cause but from several others, is one which calls for careful investigation. It is through the medical profession that much can be done to correct this great evil. Gentlemen, we have a duty to perform and an opportunity of doing something for the well-being of our State and nation, as well as for humanity. I would suggest that a committee be appointed to consider this subject, to suggest a remedy for it, and for them to report at the next meeting of this society.

In an imperfect manner, I have tried to show you some of the things that we as physicians should do, and if anything of good, or in any way a suggestive thought may produce some result that will be for the elevation of the profession, or for the betterment of humanity, I shall be truly grateful. I thank you for your kind attention.

Do not be too sure that a mass in the region of the pylorus is a carcinoma. In some cases the infiltration around a chronic ulcer is very extensive and may simulate the feel of a new growth.—*Amer. Jour. of Surgery.*

THE ORATION ON SURGERY.*

Four Decades of American Surgery.

By Albert Vander Veer, M. D.,
Albany, N. Y.

Mr. President and Members of the Medical Society of New Jersey:

I desire to express my earnest thanks to this society for the kind invitation extended by the worthy Chairman of your Scientific Committee to be present this evening and deliver the oration on surgery. Let me assure you it affords me much pleasure to be recognized by such earnest workers in the profession of medicine, and in the State where rests the bones of my ancestors.

The subject of my address, "Four Decades of American Surgery," embraces the following periods: First, 1866 to 1876; second, 1876 to 1886; third, 1886 to 1896, and fourth, 1896 to 1906. It will readily be understood this comprises the time since my entrance into private practice.

The Civil War had done much to develop a class of men which had advanced the art and, to some extent, the principles of surgery, but there was not much of great value that could be grasped and applied to its practice, in the routine of private work. The same serious mortality continued in amputations. A most interesting paper could be presented, taking up the years of the first decade, when amputation of the thigh reached a mortality of 66 per cent., and now, at the close of the fourth, scarcely reaches 6 per cent. The attempt to save life where the joints had been injured by bullet and stab wounds, had been almost a complete failure. The mortality in regard to gunshot wounds of the intestinal tract had not lessened and remained but a little lower than 100 per cent. It is true that some advances had been made in the study and understanding of the treatment of bullet wounds of the brain and chest; that at the close of the war the use of the thermometer had been of service, and that resection of the joints had met with considerable encouragement, but hospital gangrene, erysipelas and infectious conditions of wounds remained the same. Suppuration yet continued as the enemy of successful surgery. This had been recognized and the drainage tube introduced by the more

advanced surgeons had resulted in much benefit; the rubber tube, as now, being of more uniform value.

The war gave us a large number of young and middle-aged men who were earnest students. Many of them took post-graduate courses after they were mustered out in 1865; many of them in the next few years took advantage of a period of study abroad and these men were in a receptive condition, ready to grasp any marked advances in the principles and practice of surgery. Many of them became our early specialists. It is interesting to note how really few specialties there were at the beginning of this decade, but during its time gynecology, orthopedic surgery, otology, laryngology, dermatology, genito-urinary and venereal diseases developed as important and special branches of our profession, and laid the foundation of what has since become one of the marked and interesting features of American surgery. It was during this first decade that the discoveries of Pasteur, Tyndall and others, in regard to the presence of micro-organisms in hospital wards, began to be understood and, although it led to an erroneous use of so-called germicides by so brave and inquiring a surgeon as Lister, yet it paved the way for the future discovery and classifications of bacteria, their special influence upon the healing of wounds, and the later development of aseptic surgery. This period was most important, as later events developed, and the onward progress, introducing lines of study and investigation destined it to lead to the evolution of modern surgery, which, as we now view it, seems marvelous. Few men of that period realized, as they followed further investigations, what was ahead of them, and how great was to be the development of operative work. Take, for instance, the subject of hernia, an operation that was then approached with great anxiety, and with a full understanding of the responsibilities that rested upon the operating surgeon. To have a successful result was greatly to the credit of the operator, particularly in cases where there was evidence of marked strangulation. Few of those here to-night can realize how great was the discussion regarding the condition of the contents of the sac, and whether it was advisable to open the same, observe more closely as to circulatory changes, or simply relieve the constriction. Resection of gangrenous portions of the gut was almost unheard of. Later surgeons became more bold, the sac was opened, contents carefully examined, and

*Delivered at the 141st annual meeting of the Medical Society of New Jersey, Long Branch, June 25th, 1907.

gangrenous portions of the omentum tied off, but if the intestine was also found in this condition it was considered safer for the patient, after opening the sac, to leave it to nature to form an artificial anus. However, with the carbolic spray, and, as we believed, the use of additional antiseptics, a more thorough operation was attempted and resection of the diseased or injured intestine was gradually introduced. In the second and third periods various methods were suggested for treating hernias and doing away with trusses, through the use of injections with various astringent preparations, etc., but it is more particularly in the last decade that we have reached a point where we deliberately attack the hernia, by one method or another. A large percentage of our cases make good recoveries, with few relapses, and with an exceedingly small mortality list.

At the end of the first decade the study of microorganisms really began, but it was in the second, through the earnest efforts of some of our American bacteriologists, also those of Germany, that a classification of the various germs was made. *Staphylococcus pyogenes aureus* and *albus*, *streptococcus pyogenes* and *streptococcus erysipelas*, and the other varieties were becoming well understood, and the results they produced when brought into contact with wounded surfaces were more intelligently observed. In the second and third decades the work of the surgeon was greatly aided by the establishment of laboratories, in connection with our larger medical institutions and hospitals, and no one can estimate the amount of good that has resulted from this line of work. In this manner the preparation of dressings has been worked out; the sterilization of ligatures and instruments; the preparation of the patient and surgeon and the proper study of the intestinal canal and excretory functions of the body has all been of immense benefit to the practice of surgery.

In the first decade great progress was made in surgery of the urethra. Experiments previously demonstrated the distensibility of certain portions of the urethra and the location of strictures of large calibre, also the diagnosis of all contractions throughout the entire urethra. The bulbous pointed bougie, the olive-pointed bougie, the use of the whalebone guide, the introduction of tunneled instruments and of various instruments for dilating or incising strictures brought much progress, and from that time on no surgeon has been kept awake at night with the thought that he is unable to relieve a patient suffering from stricture

of the urethra, with retention of urine as a complication. The introduction of the aspirator at this time was of vast service to the surgeon—an instrument of simplicity, but of great aid in the diagnosis and treatment of surgical conditions.

We now witnessed the beginning of the operation for oöphorectomy, and while at various periods it has been severely criticised, yet, beyond a doubt, it has been the means of alleviating much suffering, and is at the present time a well-established procedure, in properly selected cases. This period also ushered in the successful operation of cholecystotomy a procedure that has been continued with the same degree of success. Now also great success was procured in the treatment of tumors of the orbits and malignant growths of the neck, by the tying of one or both of the carotids, and this has been followed out since, marking a decided advance in surgery of the neck and head. The treatment of aneurisms also, by means of the ligature, etc., was most impressive, as was arterial ligation for treatment of aneurism, without injury to deeper structures of the vessel. In 1880, under antiseptic precautions, the tying of the left common iliac artery, for an aneurism of the left external iliac, was done, and marked a great advance in the freedom with which the peritoneum could be approached by the general surgeon. Also during this period the introduction of the elastic bandage was brought to the attention of the profession at large, and the so-called bloodless operation for amputation was carried out with great success. The operation for amputation at the hip-joint, by the various mechanical contrivances suggested then and later has made it a great success, and with their employment the operating surgeon of to-day has no more anxiety than with the average amputation. With major amputations I remember well the discussions occurring in our societies, and papers published in the medical journals, regarding the dangers of ligating the veins, but it was proven beyond any criticism a safe procedure, and has been carried out more or less since.

Great advances were also made in the treatment of dislocations, undoubtedly the beginning of those studies that have led to our better knowledge of reduction of dislocations of the hip and shoulder by simple manipulation. I would like to emphasize the grand advances made during these forty years of American surgery in the treatment of luxations by manipulative methods. While not entirely due to American surgeons, yet

the vast amount of credit is theirs. It is interesting to note that at this time much discussion was given to the neuralgias observed about the feet, due to a flattening of the arch, yet it was not until the last decade that the subject was properly understood and the wearing of a good fitting insole or arch was made use of, thus benefiting our patients so greatly in this peculiar surgical lesion. The various forms of neuralgia in general were earnestly studied and great success attended the different re-sections of the trunks of the fifth pair, but again, not until the last decade has the major operation for the removal of the Gasserian ganglia been accomplished, and possibly better results brought about.

This first decade, as we study it more closely, and the important points upon which I have just touched exhibits a most commendable spirit of inquiry on the part of American surgeons to investigate and to advance operative surgery upon safe ground. This was largely brought about by the early efforts in antiseptic work; however, it was during the second decade that it developed more fully, and then, in the third decade, as aseptic surgery, became fully established. At the present time we only think of the plain, simple sterilization of our field of operation, of instruments and ligatures, of our hands and person, of the dressings and ideal methods of operating, yet much of this has been brought about by American surgeons.

In this first decade the simple operation that was introduced for relief of adherent and contracted prepuce, in its relation to the partial paralysis of the lower extremities, and the many reflex nerve symptoms, is certainly entitled to our gratitude, for it has been the means of relieving many suffering patients who otherwise had been allowed to go on without any aid being afforded them by medical or surgical treatment. The operation for relief of vesico-vaginal fistula, for repair of the lacerated cervix and perineum was an advance that sheds a lustre upon the work of the men who were then doing American surgery. The writer can not omit calling attention to the very few cases now seen, of vesico-vaginal fistula, as compared with the beginning of the first decade. During this same period was accomplished removal of the carcinomatous tonsil and other operations about the mouth and neck so creditable to our American surgeons.

We now witnessed the endorsement of silver wire, and the introduction of various absorbable materials for sutures and liga-

tures, which ultimately superseded the former, although at the present time there are many operations in which silver wire sutures are found most appropriate.

In the first decade the treatment of fibroid tumors of the uterus, by surgical intervention, was seldom attempted. The second decade witnessed a greater approach through the means of treating the stump extra-peritoneal with the serreneud, and the closing of the peritoneum over the stump, by one method or another. But the third decade saw the introduction of methods that gave confidence to the operating surgeon, and now, in the fourth decade, so great have been the advances, so splendid have been the results, that the operation is done with a very low mortality, and patients are relieved, who, at one time, although every effort was made to employ aid in one way or another, were doomed to a fatality most distressing. During this period what a great stride was made in the treatment of fractures, by immediately putting them up in plaster of paris, starch or other fixed dressings. The treatment of compound fracture was made more successful through antiseptic surgery.

During this first decade methods of treatment were developed that we hoped would mark great advances, but destined to failure later. How much we expected from the local anæsthetic effect of sulphuric ether, now entirely superseded by the use of cocaine and similar methods. How well do I remember the hopes that were entertained in the treatment of cancerous tumors by the use of acetic acid, and various other remedies, but which did not meet our expectations. In this time was fully developed the effort to control hemorrhage by torsion of the arteries, since proven to be unsafe, and not to be compared with the use of aseptic ligature. The same was expected regarding the use of the elastic ligature, which it was hoped would accomplish so much, in surgical operations even being carried to the point of amputation of the breast, but now seldom used in any of our surgical procedures. Subcutaneous osteotomy received a marked impetus and has retained its position in the few cases that present in surgical practice. During this period we witnessed the operation of nephrectomy, by lumbar incision, as a success. The previous operations by median incision were not successful.

In the first and second decades tracheotomy was resorted to, in many instances under most trying circumstances, yet the re-

sult was fairly successful. Later this was replaced by intubation, but during the fourth decade both operations have gradually disappeared, the antitoxin of diphtheria having relieved the surgeon of some of his former most anxious work. The second decade witnessed the employment of the knowledge of distension of the male urethra, in the adoption of rapid lithotripsy or litholapaxy, for the relief of vesical calculi. This has had its period of success and of serious criticism, but to-day is a method used in the treatment of selected cases. However, I am sure I express the opinion of many, if not all, operating surgeons in this country when I state that we are meeting with a less and less number of cases of vesical calculi. There is a better understanding of the methods of treating these patients, by examining the urine early, and by the use of the cystoscope and urethral catheter. They are at once placed upon a diet, and the use of proper mineral waters, so that we do not meet with as many cases as we did thirty years ago. Renal colic due to calculus is yet present, but the safety with which we approach the kidney for removal of a stone too large to pass through the ureter, or for its removal when it is once in the ureter, is to be remarked. Or, if it has passed into the bladder it is so easily removed that we have lessened the formation of vesical calculi very decidedly. The second, and last, decades have demonstrated pretty thoroughly the correctness of the treatment of stone, *i.e.*, suprapubic cystotomy for large, litholapaxy for small ones. Also, at this time, nephrorrhaphy for fixation of movable kidney was introduced. American surgery has emphasized the importance of aseptic catheterism and is deserving of great credit throughout the entire country, for the medical profession has received many valuable hints regarding the care of instruments and patients, in this way lessening septic invasion of the urinary tract. One of the most fascinating chapters of modern surgery is in relation to the bacteriological and pathological investigation and diagnosis of tuberculosis of the kidney.

Again, at this time, rectal feeding received great attention, and it has been so carefully studied and improved upon that at the present time it may be considered one of our greatest aids in surgical work. This period also witnessed the first attempt at removal of the ovaries, and small tumors, through the vagina, likewise the uterus, for malignant growths. We now have the introduction of carbolic acid, ergot and vari-

ous astringent preparations, in the treatment of hemorrhoids, but this line of treatment was disappointing. The length of time required for applying the cure, the number of injections, attended by some risk, and a mortality, has caused the operation to be almost entirely abandoned, and the more prompt and radical procedure of removal of the piles, or pile-bearing zone, receives the careful attention of every operator.

We now witnessed the various operations that were introduced for relief of surgical lesions of the stomach, such as pylorotomy, gastrotomy, gastrostomy, digital dilation of the pylorus, and others of similar import, many of which have now disappeared, and are no longer employed. It is essentially the period in which, primarily, successful laparotomy for the treatment of gunshot wounds of the abdomen was done. Now was witnessed the early struggles made in the development of advanced abdominal surgery, and the following decade gave us the most rational understanding of microorganisms.

The end of the second and beginning of the third decade fixes the study of local anesthesia, by means of hydrochlorate of cocaine, and the various methods of its employment. Surgery has been greatly aided by the use of this drug. Spinal cocainization of to-day is, I am sure, to be employed in certain cases, especially in patients suffering from diabetes. Cocainization of nerve trunks, in the operation for hernia, I am satisfied, is to develop more and more in the confidence of the surgeon. Local anesthesia, in whatever way employed, is our great help, and is comparatively safe. Cocaine used in the urethra and internal cavities of the body is to be employed with great care, and yet not to be ignored because of the dangers that at times have attended its use. Laparotomy under local anesthesia is peculiarly appropriate for patients who have recently passed through a long illness, or where they have met with an accident, and conditions unfavorable for the administration of an anesthetic.

The third decade has much to its credit, for in this time cystoscopy was made more possible, and the operation of nephrotomy and nephrectomy brought to greater precision. It may also be said to have been the period when the wonderful advances in abdominal surgery were brought about, and assurances given of greater possibilities. Likewise surgery of the spine, the treatment of recent fractures and removal of tumors from the spinal cord, a method that has been of much benefit in the treatment of this

class of cases were brought to our attention.

During this period most marked advances were made in the study and treatment of tumors, abscesses and gunshot wounds of the brain, and removal of blood clots. From that time on this subject has received great attention, and there have been periods of more or less success, but to-day surgery of the brain is one of our disappointing problems. The operative part can be carried out very successfully, but the ultimate results have not been altogether favorable and encouraging. The success that attended the operation for tumors of the brain, in its early introduction, was most impressive. While these cases are not very numerous, yet the operation has established itself as a proper one, and will continue to be employed by the operating surgeon. The anti-septic treatment of spina bifida, meningocele, and the various congenital lesions of the brain has become most encouraging in its results. Lumbar puncture, for diagnostic purposes, has also aided us greatly in much of our surgery of the nerve centres, and I am of the opinion that more is to be developed along this line of treatment for cases of acute hydrocephalus.

In the third decade was brought under our observation the freedom with which bone lesions could be treated. Great strides were made in the successful treatment of fracture of the patella, due to the complete knowledge of asepsis. This to me is one of the great comforts I have had in the treatment of acute traumatism of this joint. More especially is it so for we can approach a case of fracture of the patella, at the present time, make our incision with ease, clean out the clots of blood, irrigate, if necessary, with hot, normal saline solution, bring together the fragments, as you please, with fine silver wire, or, what is equally as safe and less troublesome, kangaroo tendons, or properly treated catgut, chromocised or plain. The result and benefit is so pleasing, and the risk so small, that the comparison between the present treatment of this lesion and as attempted in the early years of my practice, leads me to rejoice in the vast progress made. The open treatment, *i.e.*, free incision of the knee-joint, for the surgical lesions that are to be met with in our daily practice, as compared with our experiences during the Civil War, is enough to make any man in the practice of surgery grateful. In the treatment of fractures I feel we have not given sufficient emphasis to the ambulatory splint, and plaster of paris

dressings for fractures of the leg, enabling our patients to get about on crutches, and not confined to their beds or hospital wards so long a time as in the past.

We are not to forget the positive benefit arising from the employment of paraffin and bone crumbs in filling in bone cavities. In transplantation of the periosteum the surgeon must always bear in mind that greater success attends treatment in youth than in adult life.

In the third decade excellent work was done in the treatment of fractures of the neck of the femur, also great advances made in the care of uterine fibroids and surgery of the enlarged prostate. The same may be said in regard to lesions about the right side: Appendicitis, the kidney, ureter and gall-bladder. This, and the fourth decade have witnessed immense progress in surgery of the latter.

The third, and especially the fourth, decades present a most fascinating history of the evolution of the study of appendicitis, its symptoms and treatment, and, while this paper makes no attempt to speak of its symptoms and diagnosis, yet it is pleasing to report that in my experience with the family physician he is getting further and further away from the fallacy of relying upon the appearance of a tumor before sending for the surgeon. It was during this period that the most positive surgeons insisted upon removal of the appendix in recurring appendicitis. Suprapubic cystotomy was now urged as drainage, in cases of old men suffering from enlarged prostate, and the fourth decade has advanced some of the most marked features of surgery in the treatment of this gland. Few lesions have brought so much suffering and such a fatality in the past as has this peculiar one. At the present time so great has been the advance that prostatectomy, either by the perineal or suprapubic route, has established itself so firmly as to offer every encouragement to our patient to submit to the operation.

The third, as well as the fourth, decade has witnessed some of the most brilliant operations upon the intestines, and developed fully the various methods for resecting portions of gangrenous intestines, injured by bullet or stab wound, through the aid of mechanical contrivances. Much of this had been worked out successfully in our laboratories, by experiments upon animals, and resulted in some of the most wonderful recoveries, hitherto deemed impossible. It was essentially the experimental period in

regard to operations upon the intestinal tract and within the abdominal cavity. Also as to the use of sutures and the material employed.

During the second, third and fourth decades there was a great advance in the treatment of perforation, associated with typhoid fever, yet it is an operation coming at a time when the strength of the patient is exhausted, and has not met with so decided a success as we could wish; nevertheless, it is a recognized procedure and some of our American surgeons have brought about the best results attainable under such trying conditions. Again, the third decade witnessed the evolution of the methods of detecting the bacilli of tuberculosis, and, from a surgical standpoint, the use of iodoform, with its various preparations, which has been of great service to the surgeon in his operations upon bones, as well as in the treatment of tubercular conditions elsewhere. He has also found it of great value to pay attention to diet, climatic conditions and the endorsement of hospitals for the care of incipient tuberculosis.

The operation for removal of tubercular foci about the bones and glands, the fascia and various portions of the body, was one of the pronounced advances made by American surgeons. Tuberculosis of the intestinal tract, the peritoneum and other serous membranes, is attended with such excellent results, as to encourage us to continue this line of work. During this decade were introduced more scientific methods of examination of the blood. This has been brought to such great perfection that, at the present time no hospital or consulting office is complete without having all the apparatus necessary for making an immediate blood count or examination.

The last part of the fourth decade has given us, from these methods, most valuable results in the careful study of the blood and its bearing upon surgical lesions. The operating surgeon has found great comfort in these results, and yet it is fair to assume that the proper relation of the blood to various surgical lesions is still only in its infancy. During this period was introduced the operation for stretching the sciatic nerve, for relief of pain, first by incision, but now done as a bloodless operation in the majority of cases, with a most marked advance in simple and thorough results.

During the fourth decade supravaginal hysterectomy was urged, as compared with vaginal and pan-hysterectomy. Perhaps more attention was given to anaesthetics

during this period than any previous one in the history of this great discovery. This same investigation has continued and to-day we have the beneficial results of the work of the Hyderabad Commission. Operations upon the kidneys were followed out with more persistency, for the removal of renal calculi and other various surgical lesions, either acute or chronic.

During this decade great strides were made in pelvic surgery. It seemed almost impossible to improve upon the work done during the third decade, but the fact remains that American surgeons are now doing most brilliant work in relieving traumatism, various tumors, other resultant complications, malpositions of the uterus, suspension for prolapse, for the relief of lesions about the appendix, etc., and, while, beyond a doubt, certain steps of the various operations are to be improved, yet it is a recognized fact that the procedure is so well established as to assure us of a foundation upon which to rest our theories and direct our methods of operating.

This period has also witnessed most marvelous operations for relief of carcinoma of the stomach and intestinal tract. The complete removal of the stomach is one of the most brilliant operations the surgeon is called upon to perform, but it is growing less frequent because of the great advances that have been made by our specialists in the study of the diseases of this organ. They now bring the attention of the surgeon to these cases earlier, and the operation of gastro-intestinal anastomosis has proven to be one of the most successful of any that have been introduced since operative study of the intestinal tract was begun. We would especially refer to the operative treatment of gastric and duodenal ulcer.

Few greater advances have been made in the latter part of the fourth decade than in the proper understanding of surgical lesions of the descending colon, sigmoid flexure and rectum. In the last decade the great advances made in the treatment of injuries to the contents of the abdomen have been phenomenal. The diagnosis is now made with a greater degree of certainty and if at all in doubt it has been pretty well established that it is much safer to open the peritoneal cavity, by exploratory incision, than to trust to a lesion which has already produced a perforation of the intestinal tract, or to allow a subperitoneal or intraperitoneal hemorrhage to be treated by nature, with the assistance of the physician only.

The study of the pathology and classification of the lesions and operative treatment of the appendix has been one of the most impressive chapters in American surgery. To American surgeons is due much of the credit that results in the saving of life, by operative intervention in grave surgical lesions of this organ, which present at this time. It may truthfully be said that the third and fourth decades are essentially the years of the successful understanding of the lesions in and about the appendix.

Beyond a doubt the gynecological work of this last decade has established the fact that in the field of obstetrics rests the care of the patient, it may be said the preventive work of the surgeon, because if the patient is properly handled, many lesions are avoidable. When these lesions do occur they should be treated by the gynecologist or operating surgeon as promptly as possible. The longer these cases are left the more serious the operation becomes, and the more unexpected are the possibilities resulting, for when tissues have become hypertrophied it is exceedingly difficult to restore them to their normal function, notwithstanding the operation may be ever so brilliant and correct. From the time of the introduction of the duck-bill speculum, by one of our American surgeons, gynecology, in its steady progress, has received its greatest impetus from the surgeon. Who can estimate the great value resulting from the improved Cesarean section, and what a comfort to know that mutilations, by craniotomy, are growing less and less. One of the most impressive conditions presenting in abdominal surgery, and so clearly understood during the past ten years, is the diagnosis and treatment of extra-uterine pregnancy. How many, many lives have been saved by the modern understanding of this lesion.

During this fourth period there have probably been greater advances in the treatment of pleuritic effusions, regarding permanent results, than at any time in the history of surgery. We have observed the introduction of some of the most pleasing operations upon the air passages, such as removal of the larynx, portions of the trachea, operations upon the viscera of the thorax, and the more successful removal of the ribs, and operations upon the lungs. We have here a field that offers much in the way of surgical research and greater advance in our operative procedures. One of the pathological conditions that has attracted the attention of the surgeon, particularly during the latter part of the fourth decade, is the

influence the tonsil has exercised in introducing septic microorganisms into the system. This will become still better understood as investigations are pushed with greater earnestness along lines of original research, and here is to be noted the value to be derived from our laboratories, in connection with the work of our scientific surgeons.

All along these different decades the subject of transfusion of blood, milk, and many other solutions, has received the careful study and attention of many surgeons, and how great is our satisfaction at the present time in employing the simple normal salt solution. It is true that one of our most progressive surgeons is now carrying out some most impressive experiments in the direct transfusion of blood, but as yet it has a technique that will remain embarrassing when introduced into the sick room, and employed at so anxious a time.

As previously mentioned, the introduction and employment of the X-ray has been of value, not only in the detection of fractures and dislocations, but in the treatment of lupus and certain forms of skin cancer; however, it has been found of little value in the permanent relief of secondary deposits following operations for removal of carcinomas and sarcomas. It will relieve pain but does not produce a cure.

One of the most important conditions that has presented in the practice of abdominal surgery, just at the close of the third decade, and during the entire period of the fourth, were the cases of phlegmasia alba dolens, complicating laparotomy. Its pathology is not yet understood, and it continues to be one of the complications presenting in this line of surgical work. Following cases of gangrene of the intestine we have one lesion not at all clear, and but too often fatal, *i. e.*, mesenteric thrombi, and the still more fatal lesion of paralytic ileus. All along during the time of our study and great advances in this line of work, we have had phlebitis, following our operations within the abdominal cavity. The technique may be ever so perfect yet we are still confronted with a problem which I feel laboratory investigation and research will undoubtedly solve in due time.

The writer would like to relate his experience in operative relief of goitre, making comparison between the first and last decade, but will simply arouse the thoughts and curiosity of the younger and middle-aged men present, by calling attention to the seriousness of the operation when at-

tempted without our modern instruments, such as the artery clamp, etc., the use of cocaine to-day, in suitable cases, and the treatment of exophthalmic goitre by serum.

The following are some of the surgical procedures, which, at the time of their introduction, it was hoped would be of great value, but have been tried and found wanting:—Castration and vasectomy for relief of the enlarged prostate; the various treatments for cancer; stretching the nerve trunks for relief of locomotor ataxia; the use of the carbolic acid spray; its various instruments now figuring as museum relics; the use of hydrogen gas in locating gunshot perforations of the intestine craniectomy, etc., etc.

Like the study of amputations, septic inflammatory conditions of the pelvis and uterus are becoming better understood. The operative surgeon, who is called upon to relieve lesions of the uterine appendages, not infrequently is impressed with the belief that the gonococcus is far more detrimental than is the spirochaete pallada.

In all of these various periods we must give credit to the honest American surgeon, who, in his investigations, and in the practical application of his methods, has made use of the various surgical societies and associations, and reported his cases through the medical journals. These methods have benefited the whole profession. From the beginning of the middle portion of the third decade, and up to the present time, there have probably been published a greater number of papers on surgical lesions than ever before in the history of surgery.

During the fourth decade our American colleges have passed through a delightful change in methods of medical instruction. The teaching of surgery has become more practical and less didactic, instruction and clinical advantages have been brought to a greater stage of perfection, and our students, ending with their hospital courses, are as thoroughly educated here as in any other country of the world.

Finally, it may be said that the surgery of the world is best represented to-day by two famous American surgeons, whose names it is not necessary to mention before such an intelligent audience.

Accumulated experience shows that castration alone will not cure the great majority of cases of tuberculosis testis. In many, if not most, cases the vas deferens, seminal vesicle or prostate is involved, and it will be necessary to remove one or more of these structures in order to cure.—*Amer. Jour. of Surgery.*

ORATION ON MEDICINE.*

The Physician and the Medical Press.

By Morris Manges, M. D.,
New York City.

I wish, first of all, to thank you for the courtesy you have extended to me in asking me to deliver the annual oration on medicine before this Society.

I have chosen the topic "The Physician and the Medical Press" because I believe that the purpose of an address of this kind may at times be best fulfilled by the choice of a subject which is of actual everyday interest to every member of the Society. This is my excuse for the consideration of this ethical question rather than one which is of a purely medical character.

We are living in restless times; the spirit of unrest is abroad. Inquiry is directed everywhere. Nothing in the business world about us has escaped the inquisition. The very air breathes investigation and reform. It is an age of drastic purging.

Such periods are of the greatest possible good in every sphere of life, and not the least in the medical profession. Extreme reactions do good by accentuating evils, and virtues, too! They make the former appear worse, and the latter better than they really are. The pendulum may swing too far in either direction. But what if it does? Sooner or later a true equilibrium is established. Unjust censure is no better or worse than unmerited praise; and if, perchance, any one should receive the former rather than the latter, he should remember that this is part of our very existence and should be adjusted by the law of compensation and averages. Who of us has ever complained of undue credit? Let it serve to equalize the unearned and undeserved blame and censure.

Such periods of unrest serve another purpose which is also of great benefit, namely, they afford an opportunity to correct minor abuses which have been patiently tolerated, and which have persisted in spite of desultory and spasmodic attempts to correct them. The wave of radicalism sweeps wide, and fortunate is the community or class or profession which is able to direct this force wisely and effectively. Thus what might

*Delivered at the 141st Annual Meeting of the Medical Society of New Jersey, Long Branch, July 25, 1907.

have developed into a calamity may be converted into a veritable blessing.

Our own profession has been subject to these same influences and much good has already been accomplished by this radicalism. We have only to consider the enormous benefits which have been conferred by the pure food and drug investigations, in which both the medical and the lay press, especially the latter, has been so actively engaged. It is, however, deeply to be regretted that not alone has the lay press been more active in this work, but what is worse, the medical press has not been a unit in this fight. Too many journals have either been silent, or at best, half-hearted in their efforts. Other journals have practically opposed the movement. Factional strife is always detrimental to the ends to be attained and is most useful to the common enemy. The cloven footprints of self-interest have been seen too often. We have traitors in our own ranks whom we have not alone harbored, but we have been and still are affording them subsistence and aid. In too many instances the lay press has been far more altruistic than our own medical press, for they could resist the temptations and lures of the advertising pages. We have deserved the scathing rebuke of Mr. Bok, the editor of the *Ladies' Home Journal*, who, in a recent discussion before the Philadelphia County Medical Society, said: *

*Journal American Medical Association, Feb. 23, 1907, p. 689.

"Look at your average medical paper—reeking with the advertisements of proprietary, so-called ethical preparations. And not only advertisements, but reading notices palpably intended to deceive. The very class of papers that should have been the first to cleanse their pages is to-day the last to make even a move in that direction, and stands to-day, in this respect, as a discredit to honest journalism.

"Now, what is the result? I go to the publisher of a newspaper and ask him to clean his columns of 'patent medicines,' and he points, as he has done in many cases to me, to the medical press. 'Why, man,' he argues, 'these preparations can't be so bad as you fellows make out, or they wouldn't be advertised in these medical papers. These medical publishers know better than you do what is good and what is bad in these "patent medicines," and what they allow to go into their papers I guess we can safely stand for.' That is why it is so important that the medical press should be cleansed of these advertisements; it is in the influence, the example, that they exert on the lay press, and it is an argument on the part of the lay publisher that is very difficult to combat. It is this argument that again and again is used by lay publishers in writing to their protesting readers, and then these readers send the letters to me and ask: 'Is this true? Are these advertisements permitted in good medical papers?'

"Now, you know that it is true, and you know

also that it should not be so, and yet what have you, physicians, done to stop it? You have, in your societies passed resolutions, a very easy and comfortable thing to do and about as ineffective as it is comfortable. I have myself seen these resolutions received by the medical publishers, and disposed of with a grin—in the wastebasket. But what have you done as individuals? For, let me tell you, as an editor, that the editor or publisher of a paper of any kind is mighty sensitive to the individual protest of his readers. When letter after letter comes in harping on the same subject, take my word for it, that editor or publisher is going to sit up and listen. Those letters are from the people on whom he depends for his support, and he is not turning a deaf ear to the source of his livelihood."

I have quoted these remarks in full because no one who is at all conversant with the situation can deny the truth of the facts or claim that they are at all exaggerated.

What has the medical press done with so sweeping an indictment? In how many journals have you seen any reference to this address which was delivered last December and published in February? In how many have you read any editorial comment on it? In how many have you seen any effect in the make-up of the journal? The only recent changes in the advertising sheets of the medical journals are the subtle ones which have been necessitated by the demands of the Pure Food and Drugs Laws, where chemical and botanical names adorn the subtitles in small print, or contemptible subterfuges are resorted to like that of the Anasarcin Company, which boldly claims that its product is guaranteed under the Food and Drug act of June 30th, 1906, Serial No. 413, although the report of the Council on Pharmacy and Chemistry of the American Medical Association, has shown this to be a most flagrant fraud of the worst type.

I could show you journals, some of which claim to be among the best in the land, in the very latest issues of which advertisements are just as brazenly printed as they were before Mr. Bok's ringing words were uttered. It is, therefore, eminently proper that the medical profession, as such, should take part in this movement, and that a voice of authority should be raised, which should express in no uncertain language just what the practicing physician feels and thinks on this matter. Thus far there has been too much of the editor or proprietor of the medical journal whose self-interest is skillfully balanced between the rights of the doctors and the demands of his advertisers. The rules which have guided him in regard to advertisements are based on one standard, which, in too many instances has been regrettably low. These same editors, and,

gentlemen, I am not referring to the editors of obscure commercial sheets, but to the editors of some of our leading influential journals—these editors will lay down an entirely different set of rules for the contributors—the doctors whose interests they are supposed to represent, the doctors who pay the subscriptions, the doctors whose only recompense from the journal is the privilege of paying for reprints—often in advance.

Away with such hypocrisy which is as detestable as would be the spectacle of a minister preaching sermons in the church while a gambling joint was in full blast in the rooms of the Sunday-school beneath. Consistency is a virtue which even editors and proprietors of medical journals may cultivate. That which is unfit for the body of the medical journal is equally unfit for the advertising sheets. Let one part supplement the other and let an equally good tone pervade both. The underlying fault has been that the publishers have looked out for the advertising part of the journal only, and it was the editor's duty to see that nothing in his division interfered in any way with the revenue from the advertising pages.

How can the medical profession remedy this? Again, I cannot do better than to quote Mr. Bok: (*loc. cit.*)

"Now, while the people at large have been busy with their papers, I have not heard of a single, well-ordered and coherent movement on the part of the medical profession individually to do the same work with its papers. You have talked beautifully, but what have you done? The best proof of the fact that you have done practically nothing is shown in the condition of your papers, and yet, gentlemen, it was your duty more than the duty of any other body of men, to do this. It is no excuse to say that physicians are too busy. There are men in other professions just as busy as you are. You have been inactive. You have allowed us laymen to work with our papers while you have sat idly by, or made desultory attempts, where you should have taken a vigorous individual stand and stopped it. And you can stop it if you make the honest effort. You are the supporters of these papers; without you they can not exist, and on you, directly and solely, rests the responsibility of the present situation that we as laymen can scarcely go any farther with compelling the cleansing of our papers so long as those papers can point to the medical press as its companion in perfidy.

"You have two ways open to you:

"Either insist as subscribers and readers that these papers shall cease these advertisements;

"Or stop, as physicians, from prescribing these medicines yourselves and thus make this advertising unprofitable. Or both."

Having then disposed of that part in which the editors alone are at fault, let us proceed to another deplorable feature in which the doctors are more to blame than the editors. I refer to the results which

have followed the exploitation of proprietary preparations by physicians.

Has it not struck you that during the past few years there have been very few papers on any of the many new drugs in our leading American journals? Contrast them with the English and continental medical journals and note the frequency with which papers on new drugs, written usually by men of the highest standing, or their assistants, appear in the latter. In our own journals you will find papers on new instruments, new operations, etc., in abundance, but never one on a new drug. If you should desire any information about a new drug you must consult the advertising pages or write to the manufacturers, or listen to the panegyrics of the drummer who litters up your office with samples.

This situation is most unfortunate, and moreover, is a very difficult one for the editor, the contributor and the reader. The editor is in a dilemma because he must consider both his reading and his advertising pages. The advertiser must not be antagonized; favorable reference cannot be permitted to one drug, whether it be an advertiser or not, without allowing the same for the others advertised. Then, too, the editor cannot easily determine whether the article is a paid write-up or not, which will later on be reprinted and sent out broadcast either directly by the manufacturer, or, what is most reprehensible, sent out by the doctor himself with advertising matter of the drug lauded. Finally comes the difficult question of nomenclature—whether the drugs should be referred to under the trade name or under their chemical or botanical title. Hence the policy of the American journals has been to exclude all papers on drugs, and even to prohibit reference to non-official drugs under the trade name in any article in the body of the journal.

For the honest doctor the situation is equally embarrassing, for any contribution may be regarded as mercenary and his motives may be questioned. His experience with a particular drug may have been very large and he may possibly be able to present valuable data which will be useful to the readers of the journal. But, no, this is usually impossible or is rendered so difficult that the honest practitioner is loath to repeat the experience. I might cite two experiences of my own of this kind:

Three years ago I wished to publish a short paper on the result of an extensive experience, extending over five years, in the rectal administration of the newer hypnotics.

This paper was rejected by two of the leading New York journals because it mentioned certain drugs by name, and was only published by another of them as a personal favor. The real object of the paper was to demonstrate the fact, hitherto unknown, that these very insoluble substances could be absorbed by the rectum and their effects could be obtained as readily as when taken by mouth.

Another instance happened a year ago in the publication of a paper which I had read on "The Liberal Diet in Typhoid Fever." In the course of this paper I referred to the fact that the milk, soups, or broths could be strengthened by the addition of certain food preparations, and, in order to be impartial and to show that no particular preparation was to be preferred, I mentioned three different substances which represented three classes of food preparations. The manuscript came back with the editorial blue pencil through this sentence. Under protest the sentence was allowed to stand. Yet, how else could I have expressed the fact that the patient was to get additional nourishment in his milk and that this was to be supplied in some form which was compact, nutritious and easily absorbed? As it happened, the preparations mentioned were those which had long since passed beyond the need of any advertising on the part of anyone, but were well known to all practicing physicians.

The reader is also the loser, because he does not find in the journals what he so often needs in his practice. He hears of new drugs, sees the advertisements, receives occasional samples and visits from salaried drummers and thus obtains nothing but biased reports. An honest and unprejudiced opinion he cannot find anywhere. How shall he learn anything about non-official and new drugs, the official recognition of which cannot be granted for a long time. How can he recognize nostrums or worthless preparations unless they are discussed in the pages of the medical journals?

The present situation is not altogether a calamity, for nearly all physicians prescribe too much. If only the students at the medical schools were taught therapeutics rather than materia medica; if all the healing forces were detailed and studied as carefully as the various official preparations; if the principles of materia medica and the writing of prescriptions were properly presented, then the young and the old doctors

would enable them to separate the wheat from the chaff. But this is an old story which is familiar to everyone, and which has been presented so often in every discussion on the nostrum evil. Till this will have been corrected, and until the time comes when the prescription will have lost its talismanic qualities in the eyes of the patient, it will be necessary for the physician to prescribe drugs. In doing so he ought would develop the critical judgment which not alone to make use of the older preparations, but he should also avail himself of the contributions which are being so richly yielded by the evolution of chemistry, as a result of which older preparations will continue to be improved and entirely new ones will be discovered.

Our medical press must take cognizance of these newer preparations in the body of the journal as well as in the advertising pages. How can this be done? Happily the Council on Pharmacy and Chemistry of the American Medical Association has cleared the way and has given us the solution of this difficult problem. This committee has carefully studied all the non-official preparations, and as a result of its labors has published a list which appeared in the recent numbers of the *Journal of the A. M. A.* and is now published as a separate reprint, which may be obtained by anyone for a few cents.

Editors should, now and then, admit selected papers on drugs which are contained in this list; or, they should do as is done abroad—at regular intervals they should publish a review in which descriptions of the newer preparations are given, their uses and indications briefly given and their value indicated. The titles under which these drugs are described may be the ordinary ones used in prescribing, unless there is a special reason to the contrary. *The reprinting by manufacturers for commercial purposes of any article printed in a medical journal should be forbidden.* Papers on drugs should be headed: "Reprinting or use of this paper for commercial purposes is prohibited."

Supplementary information should be allowed in the advertisements, which should be limited to the list given by the Council on Pharmacy and Chemistry of the American Medical Association. While fault may be found with this list, yet, under the circumstances it is the best which could be prepared. An ideal list which will satisfy everybody, and which at the same time will

be perfect, is an absolute impossibility.¹ But every reform of this difficult problem will fail utterly unless all physicians who write papers of this kind are honest in their purpose and in their observations. If they fail in this cardinal principle we have only ourselves to blame if editors continue to suspect all such papers.

As already stated, times of agitation like the present are most useful for effecting other reforms. The correction of one evil must logically remedy other conditions, some of which have resulted from the primary faults. Thus, first of all, the regulation of the advertisements will reduce the number of medical journals. There are far too many of them. In the United States alone there are 270 medical journals to 122,200 physicians, or one medical journal to 453 doctors! Many of these lead a precarious existence and are barely kept alive by undesirable advertisements. According to the legitimate demand for them as journals, many of them would not exist. Therefore, let the law of supply and demand apply to these weaklings which have only commercial reasons for their existence, either to fulfill some selfish purpose of the editor, or for the purely business reasons of the proprietor.

These infant industries have not thriven in spite of the high tariff protection of their advertising pages. Let them purge themselves of these offensive advertisements. If they cannot be made profitable without the latter, let them raise the price of their subscription. Every product has a legitimate price; it is absurd to sell too cheaply. If a journal is really wanted the doctors will cheerfully pay a legitimate price for it. If a weekly issue is not profitable, let it be made a bi-weekly or monthly; or, if this fails, let the weaker journal consolidate with a stronger one, or cease to exist.

And now, what can the doctors do to improve the body of the journals? They should not demand that every paper which may, perchance, be read or written should be published, as if the continuation of their subscriptions or the circulation of the journal in their district depended upon the publication of their papers. It would also be better if doctors talked more and wrote less; if the papers were shorter and the discussions longer. Then the latter would be

something more than mere polite exchanges of platitudes. The formal paper need not necessarily be written. There should be an end of the foolish notion that it is an insult to the audience and a sign of lack of preparation if the subject is discussed from a few notes rather than from a typewritten paper. Every paper which is read must not necessarily be published. The reading of a paper usually fulfills its purpose; the demands of the president of the society will have been responded to, or the writing impulse will have been satisfied. Then, unless the paper contains something new or important, it should be quietly put away and forgotten. The vain demands of priority, too, should be hushed. Remember how long Harvey kept his manuscript on the circulation of the blood. Remember, too, that Harvey had to be coaxed by Dr. Ent before he reluctantly gave up for publication his manuscript on generation.

Let the weak offspring of the numerous symposia die unprinted. These puny products subserve their purpose as a part of the whole when they are delivered before the suffering audiences who patiently and expectantly sit through these performances which usually produce nothing new, but which are, in the vast majority of instances, merely rehashes of what was known to nearly every listener who is at all familiar with his textbook and his literature.

Finally, physicians should remember that brevity is the soul of wit, even in a medical paper. The long papers bore the audience and are rarely read when printed. These are the papers which are usually marked and put aside for reading at some leisure time. But whoever thinks of them afterwards? The short crisp paper is listened to with attention and is read promptly. Even in 1907 the writing doctor may well follow the example of Harvey, the preface to whose great masterpiece contains this apology: "I do not purpose to swell this treatise into a large volume by quoting the names and writings of anatomists, or to make a parade of the strength of my memory, the extent of my reading, and the amount of my pains; because I profess both to learn and to teach anatomy, not from books but from dissections; not from the positions of philosophers but from the fabric of nature." Or he could with great advantage study the fresh style and the terse and vigorous diction in Addison's writings.

This naturally leads me to another point—if there were fewer journals then the doctor would have time for occasional study of

¹For a full discussion of the reasons for the formation of this Council, its methods of procedure and the results thus far obtained, see Simon's paper in *Journal Amer. Med. Ass'n*, May 18, 1907; pp. 1645 to 1654.

the medical classics, which, like the classics of general literature, are bound in more or less sumptuous raiment and are left lying on the bookshelves for respectful admiration *en masse*. But who ever thinks of taking them down to read them? No, the doctor is like the general reader who will waste his time over some magazine article written by some obscure penny-a-liner, while he will not read a classic because he must keep up with his newspapers and current literature.

In conclusion I would say that every press is the mirror of its times; it faithfully reflects existing conditions. The medical press is no exception to this rule, and if we would have a better medical press, we doctors must first better ourselves.

THE SIGNIFICANCE OF CERTAIN ABNORMAL STOOLS IN EARLY LIFE.*

By Godfrey R. Pisek, M. D.,
New York City.

Professor of Diseases of Children, University of Vermont; Adjunct Professor of Diseases of Children, New York Postgraduate Medical School and Hospital.

In our work among infants and children we must utilize every means at our command to establish the diagnosis. Observation coupled with logical deduction is, to my mind, the pediatrician's greatest aid. In these days of laboratory work we are often thus enabled to verify or complete our diagnosis, and the tendency is, especially in or near the metropolitan centers, to lean on and abuse this means at our command, by making superficial examinations and trusting to the pathologist or bacteriologist for further aid. Those of you who are of necessity thrown more upon your own resources are often better clinicians than your city colleague, and the purpose of my paper to-day is to point out the importance of the careful examination of the stools of infants and children, and draw to your attention the wealth of knowledge which is thus obtainable, and its practical application to the case in hand.

To ask for and inspect a stool at a respectful distance, as is the common practice, means the loss of valuable clinical aid; and, in fact, may mean the loss of the baby, for the statistics show that the infant mortality in the first year of life varies from 19½

to 39 per cent., and of these 60 to 70 per cent. die of gastro-intestinal disease. In a general way it will be the aim to show what deductions we may easily make from a careful inspection of an abnormal stool, provided we have certain fundamental facts relating to all dejecta in mind. No chemical laboratory, nor even a microscope, is necessary. Careful inspection, some litmus paper and a spatula are alone required.

We will recollect that the stools of the breast-fed infant may be from one to five in number, and numerically we should not judge them as abnormal, provided their color, consistency and odor are within the normal limits. Their color should be a yellow or orange tint, produced by the unchanged bilirubin; they should be acid in reaction, and the odor should not be disagreeable. The amount of residue found in the stools will be in direct proportion to the amount ingested or retained. This latter statement, however, does not hold true for babies artificially fed. And this leads me to review the essential differences of the stool of the breast-fed and artificially fed infant.

The stools of the babe taking cow's milk, which differs chemically in its proteids, fats and ferments from human milk, and also physically and biologically, it is readily seen, will and must differ from the stools of the naturally fed infant. And therefore these stools are not to be considered as evidences of a diseased condition, unless they exhibit certain characteristics to be mentioned below. Cow's milk normally produces a stool lighter in color, bulkier and numerically fewer. Rubner and Heubner have shown that in bottle-fed children the feces amount to 4.7 per cent. of the food ingested. The pale color is accounted for by the fact that the reducing power of the breast-fed infant's intestine is so weak that the bilirubin can pass through unchanged, while with cow's milk the process of digestion is slower, and necessarily carried further with the resultant pale color and the odor of decomposition. It is this tardy disposition of the proteid elements which exposes the food of the bottle-fed child to intestinal putrefaction. Then, too, we must expect a greater bacterial flora in the feces of the bottle-fed, and should find an alkaline or neutral reaction. Those who are artificially fed are very apt to show abnormal stools, and, unfortunately, the condition is many times brought about by improper or careless feeding prescriptions of the doctor in charge.

Infant feeding to-day is a science, but it must also be an art. The textbooks have

* Read before the Sussex County Medical Society May 21, 1907.

been confusing because the subject has in the past ten years undergone a radical change. Let me urge upon you to make yourselves proficient in this acquired art, and your practice among the babies will be a delight instead of a bugbear. The systematic examination and correct interpretation of the stools will naturally assist you in properly regulating the dietetic therapeutics of infancy, for it will act as a criterion of the kind of disturbance in indigestion which is present. The character of the *dejecta* will depend upon the class or kind of food given, upon the functional development of the alimentary canal, upon the influences to which the fecal mass is subjected, as, for example, intestinal ferments and bacteria, and to the amount of absorption which has taken place.

Happily we are not so often concerned with abnormal stools of the breast-fed infant. If, however, we examine a freshly passed stool from an infant fed on human milk, and with an improvised spatula spread out a central portion, we may find that there are yellow masses or flakes present, surrounded by green mucus; these are often mistaken for curds, but in reality are made up of fats; firm, hard curds are not found in mother's milk—only in cow's milk. Such a stool in an infant not steadily gaining would indicate a scanty milk supply, and if the stools were frequent, dark green and mucoid, with very little milk residue, the maternal font would surely be found to be at a low ebb. The indication would be, alternate feedings and regulation of the diet and life of the nurse.

In the bottle-fed baby we are often confronted with the symptom of constipation or diarrhoea. Either of these conditions may arise from too much proteid in the food. The constipated stool will be friable, like dry putty, while the loose stool due to this cause can be smoothed out and the masses will be readily soluble in ether—proving them to be fat and not curds, as they are so often designated. True curds are formed in the stomach by the action of lactic acid, or an excess of hydrochloric acid, on the paracasein. They are hard, smooth, yellowish on outside, and white within, with a cheesy odor when opened, and will not dissolve in ether. The remedy for too much proteid is evident. Correct the formula, and if true curds are present, examine the character of the milk. The milk may have been sterilized or it needs to be properly, mechanically diluted with gruels, or chemically modified, when the stools will assume the normal type. A

loose, greasy, sour-smelling, acid movement, resembling scrambled eggs, will indicate excessive fat in the dietary. Examination of the breast milk, or a study of the formula will show that the fats ingested have been persistently too high. Three per cent. of fat should never be exceeded by an infant to the third or fourth month and more than 4 per cent. should never be prescribed.

Mothers often erroneously describe the large quantities of mucus present in the baby's stools. The doctor must remember that some mucus is normal; that it should then, however, be found intimately mixed with the feces. That barley water produces a slimy stool often mistaken for mucus, and that undigested food elements also cause this error. If mucus is seen in any quantity with the naked eye by a competent observer, it is pathological and means inflammation, usually located in the large intestine, of a sub-acute or chronic form. If the disease is in the small intestine the mucus is mixed with the stool and it is usually found to be bile stained. The hint for correction is embodied in the following fact—that the greater the amount of non-assimilable substances present, the greater the amount of mucus.

The color question in the stools (like the color question in the South) is often perplexing, worthy of study, and not yet decided. The color of the stools when immediately passed should be considered. If the absorptive process has been delayed and putrefactive changes have taken place in the proteid element the bilirubin will be changed to biliverdin, but it is not known whether the reaction itself, or chromogenic bacteria produce the coloration. Nitric acid will prove whether or not we are dealing with bile salts by the familiar play of colors. The green color in conjunction with mucus and fecal acid reaction indicate true intestinal disease and call for radical change in the dietary. Acid fermentation will require such temporary food as albumen water for its correction, while alkaline putrefaction will respond to the carbohydrate foods, as dextrinized gruels. The brownish movements often seen, if we exclude certain drugs and blood, are due to the ingestion of undextrinized starches alone, or a preponderance of carbohydrates in proprietary infant foods. A stool that presents a foamy, bubbling appearance and is acid in reaction will signify the presence of too much sugar in the mixture, as is often the case in condensed milk feedings.

We have not hinted at the bacterial examination of the stools; as it has proven of no

clinical value to us as yet, but the reaction of the stool is a help and should be ascertained and always taken from the middle of the fresh stool. If a blue color is obtained, we have alkaline proteid putrefaction going on, and if the color of the litmus is unchanged, we have acid fermentation due to the breaking down of the fats and carbohydrates.

Again, the stools may be of considerable aid to us in certain pathological conditions, as illustrations of the intensity of the process in the summer diarrhoeas and in such pathological states as intussusception, in which we have frequent paroxysmal discharges with blood, but little or no feces. Rectal polypi should be strongly suspected where we have a normal stool, except for a blood coating; these hemorrhages being intermittent in character and not necessarily connected with a hard or scybalous mass.

Thus we may correct the sins of omission and commission against the laws of hygiene and physiology, as evidenced in the alvine discharges. If we take advantage of our opportunities in this direction we will be stimulated by our success to exercise the same care and logical attitude in all our efforts to further the well-being of our patient.

Reports From County Societies.

BURLINGTON COUNTY.

George T. Tracy, M. D., Secretary.

The regular quarterly meeting of the Burlington County Medical Society was held in the Auditorium Hotel, Burlington, N. J., on Wednesday, June 12th, at 1 o'clock P. M. Dr. Joseph Stokes presided. Dr. W. H. Iszard, Councilor for the district, was present, also Drs. Wm. I. Kelchner and W. P. Wingender, delegates from Camden County, also Dr. H. A. Stout, delegate from Gloucester County. Dr. Edward C. Bullock, of Columbus, was elected to membership. The application of Dr. W. C. Sitgreaves, of Pemberton, for membership was referred to the Board of Censors. After some routine business the following program was announced. Symposium on Gonorrhoea: Rational Therapy of Acute Gonorrhoea, by Dr. Alex. A. Uhle, Philadelphia; Gonorrhoeal Sequelae of the Eye, by Dr. Thomas H. Fenton, Philadelphia; Gonorrhoea from a Medical View, by Dr. Judson Daland, Philadelphia; Surgical Sequelae and the General Practitioner, by Dr. J. E. Blair, Burlington, N. J. The reading of the papers and the subsequent discussion brought out many instructive points of value in dealing with this dread disease. The Society then adjourned to dinner to meet at Moorestown in October.

Beverly, June 19, 1907.

ESSEX COUNTY SOCIETIES.

Frank W. Pinneo, M. D., Reporter.

The Newark City Hospital Training School for Nurses gave a reception to the graduating class

and their friends Tuesday evening, May 21st. An excellent program of music and recitation was rendered. Wednesday evening, May 22d, the nineteenth annual commencement took place, when fifteen nurses received their diplomas and badges (of gold) from the Board of Health. Rev. W. H. Morgan, D. D., made the address.

The Society for the Relief of Widows and Orphans of Medical Men of New Jersey held its twenty-fifth annual meeting on May 14th at Newark. The report presented by the trustees warrants the "pardonable pride" they say they feel at the conditions existing at the end of a quarter of a century, and the evidences of new growth and prosperity ahead. We notice that the amount now paid to the estate of a deceased member is over \$231, that the permanent fund amounts to \$6,843, and is increasing very rapidly, and that the membership has reached 316, twenty-one having been added during the year. The expense of management is only eighty-eight one hundredths of one per cent. of the funds handled. For economy, absolute security and assurance of a comfortable sum paid to a doctor's estate at death immediately, there exists no better organization, and if the 2,300 physicians in New Jersey knew of it there would be more than 316 enrolled for its benefits. That they do not is simply because they are not asked to join by the members. When the permanent fund reaches \$10,000 its income may be used for the benefit of the children of deceased members. The hope is to so increase the membership this year that the death benefit may be \$500. This could easily be done by a little personal work by members themselves. Any reader may get full information from the Secretary, Dr. C. D. Bennett, Newark. The other officers are Dr. C. J. Kipp, President; A. Mercer, Vice-President; G. R. Kent, Treasurer, and C. Young, E. J. Ill, L. E. Hollister, C. F. Underwood, E. Staehlin, J. H. Rosencrans, N. L. Wilson, R. C. Newton and G. K. Dickinson, Trustees.

The Doctors' Club of Newark has elected the following officers for the ensuing year: President, James H. Lowrey; Vice-President, Edwin N. Riggins; Secretary and Treasurer, Benjamin S. Van Dyke; Councilors, C. F. Baker, Louis Koch; Committee of Arrangements, W. H. Alonzo Warner, H. R. Widmer. The club meets monthly except during the summer.

SUSSEX COUNTY.

H. D. VanGaasbeek, M. D., Reporter.

The Annual Meeting of the Sussex County Medical Society was held at the Cochran House, Newton, on Tuesday, May 21st. The meeting was a very interesting one, and was fairly well attended. Dr. Thomas W. Harvey, Councilor for this district, was present. Dr. M. D. Hughes, President of the Society, read a paper on "Functional Diseases of the Liver." After an animated discussion of this paper by the members present the Society adjourned for dinner. After dinner a paper was read by Dr. Godfrey Roger Pisek, of New York City, on "The Significance of the Stools in Early Life." This paper was very interesting and practical. A vote of thanks was tendered the doctor, and he was requested to furnish a copy for publication in the State Society JOURNAL. Dr. Joseph Hunt then read a paper on the life and work of Carl von Linn (Linnaeus). This paper was listened to with a great deal of interest, being of high literary merit and of great historic interest.

The following members were elected officers for the ensuing year: John Moore, of Sussex, President; Dr. Jones, Vice-President; Shepherd Voorhees, Secretary; Ephraim Morrison, Treasurer; H. D. VanGaasbeek, Reporter; M. D. Hughes, Censor. Dr. E. Morrison was elected annual delegate to the State Society.

MEDICAL EXPERT TESTIMONY.

We give the following editorial from the *Newark Evening News* to indicate what the lay press has to say on the subject of expert medical testimony, which was called forth by the address of Judge Garrison at the annual dinner of our Society.—*Editor.*

Nothing has been needed of late years, and particularly since the Thaw trial, to increase the disrepute in which expert testimony is held by intelligent people generally. But much has been and still is needed in the way of some method or process by which the evils that arise from the acceptance of such testimony in courts may be eliminated. Expert testimony as at present received in criminal and in certain civil cases tends to pervert justice and to bind the jurors to the facts, rather than to assist them in rendering intelligent verdicts.

Justice Garrison, of the Supreme Court, dealt such testimony a severe but deserved blow in an address recently delivered before the New Jersey Medical Society at Long Branch. He spoke with particular reference to expert medical testimony, and declared that the conditions attending exhibitions of professional expertism were intolerable. He called upon the medical profession to adopt an ethical code that would meet and remedy them. The courts, he said, could not correct these evils; the doctors must do it themselves.

The line between the ordinary practising physician who is called to the witness stand to tell the truth, and the professional expert who is paid by the prosecution or defense, and whose testimony is for the side which pays for it, was drawn by Justice Garrison faithfully and distinctly. The one gives his testimony conscientiously and truthfully, irrespective of its effects upon the case; the other simply enters upon a business proposition and testifies as he is hired to. Not that he necessarily gives false testimony, but he gives only that which is advantageous to the parties which employ him unless the cross-examination worms out of him more than he intended.

"Whatever an expert says," remarked Justice Garrison, "another can be found to contradict; and if two or three or four say a thing to help one side, an equal number and perhaps one more can be produced to say just the opposite on the other side." Certainly this cannot correctly represent the state of science in the medical profession. It is the degradation of the profession by subjecting it to barter and sale. In this, as Justice Garrison showed, the doctor is worse than the lawyer. The latter openly agrees to make the best case he can for his client, but the doctor goes on the stand, taking his oath to tell the truth, the whole truth and nothing but the truth. Yet what a professional expert does is to first enter into an agreement for so much money, to tell only such parts of the truth as will benefit one particular side.

In point of fact the expert witness supposed to give impartial and unbiased testimony, does nothing of the kind. He is in reality not a witness but an advocate. He presents all the testimony he

can, as an expert, for one side and none, if he can help it, for the other. Such witnesses are also advocates in another sense, for they often assist the lawyers in making up the medical aspects of their cases, and then go on the stand and testify, not infrequently, with the intent to so bias, mislead and prejudice the jury that they may secure a verdict and get large fees.

Expert testimony is therefore a deception. It is prearranged, is unfair, is intentionally biased, is a breach of sound ethics, and it reflects on the standard of character of the medical profession generally. In the Thaw case some of the jurors explained, after the disagreement, that they threw it out altogether. They were certainly logical. Justice Garrison has called on the medical profession to prevent professional expertism, by adopting a code which will forbid doctors from practically becoming advocates in any case and then going on the stand to testify. Professional experts are virtually as bad as professional jurors. Both should be eliminated.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM NEW JERSEY.

Adams, John K., Orange.
 Alexander, Arch. F., Paterson.
 Beling, C. C., Morris Plains.
 Bingham, Arthur W., East Orange.
 Blenckstone, Fred O., Oradell.
 Buckingham, Fred S., Lakewood.
 Bushey, Sylvan G., Camden.
 Buvinger, C. W., East Orange.
 Clark, Emma C., Dover.
 Coe, Richard, Newark.
 Cohen, Nathan A., Wildwood.
 Condict, Isaiah W., Dover.
 Decker, C. L., Boonton.
 Edwards, J. Gaunt, Williamstown.
 Fithian, George W., Perth Amboy.
 Garside, Charles Z., Newark.
 Gilchrist, Charles A., Hoboken.
 Gilman, Robert B., Jersey City.
 Gross, Herman, Metuchen.
 Henriques, Henry A., Morristown.
 Hughes, Morgan D., Branchville.
 Jones, Ralph R., Toms River.
 LeFevre, Adrienne L., Blackwood.
 Meyer, William, West Hoboken.
 Morrison, Ephraim, Newton.
 *O'Reilly, Edward R., Elizabeth.
 Palm, Howard F., Camden.
 Pollard, Joseph E., Chatham.
 Shepherd, Irenaus M., Trenton.
 Smith, Leonard H., East Orange.
 Smith, Thomas J., Bridgeton.
 Summerill, John M., Pennsgrrove.
 Swiney, M. A., Bayonne.
 Twinch, Sidney A., Newark.
 Walters, John, Wharton.
 Welch, George T., Passaic.

* Deceased.

Do not amputate an extremity for sarcoma without a previous careful examination of the lungs and mediastinum for metastasis. Such symptoms as continued cough, a small hemoptysis or beginning dyspnea, should be regarded as highly suggestive of such a complication.—*Amer. Jour of Surgery.*

THE JOURNAL

OF THE

Medical Society of New Jersey.

JULY, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

YOUR DUES.

This issue of the JOURNAL is sent to some members who have not paid their dues. If they do not receive the August number they will know the reason. C.

The papers read at the recent meeting of the Medical Society of New Jersey will soon be put in the printer's hands. If the writers of these papers, or the persons who discussed them, intend taking vacations they should at once send their addresses to the chairman of the Committee on Publication, Wm. J. Chandler, South Orange, N. J., in order that printed proofs may be sent to them and by them returned promptly to the editor, Dr. D. C. English, New Brunswick. C.

The preparation and printing of the Index to Vol. III of the JOURNAL and of the Supplement to this issue of the JOURNAL, as well as the delay in returning proof, has caused unavoidable delay in issuing this number, and for the same reasons we postpone, for insertion in the August number, partially prepared reports of, or references to the annual meetings of the Association of American Physicians, the American Medical Editors Association, the Convention of Milk Commissions, the Executive Council of the New Jersey Sanitary Association and also references to the State Society for the Relief of Widows and Orphans of Medical Men and to the State Tuberculosis Sanatorium.

OUR ANNUAL MEETING.

The one hundred and forty-first annual meeting of the Medical Society of New Jersey has passed into history, adding a page thereto showing decided progress in scientific knowledge and, with increased members, more vigorous life manifested in unifying the profession for a more determined effort to raise the standard of educational requirement and to overthrow the evils that threaten the advancement of the profession and the safety of the public. The success of the meeting exceeded our most sanguine expectations. Our prophecy that the change of place from Cape May to Long Branch would result in a larger attendance was undoubtedly fulfilled, so that, in this instance, we were not a false or faulty prophet. It was not only one of the largest meetings our Society has ever held, but it is worthy of note that every trustee but one (who sent regret that sickness prevented his attendance), every officer, every chairman of a committee and nearly every member thereof, and the vast majority of both permanent and annual delegates were present, besides an unusual number of associate members, of ladies and other guests.

The program, as published in the June issue of this JOURNAL, was carried out with but one break, occasioned by sickness. We were highly favored by the presence of Dr. Albert Vander Veer, of Albany, N. Y., who delivered the Oration on Surgery, and Dr. Morris Manges, of New York City, who gave us the Oration on Medicine. These were excellent orations, they were listened to with closest attention and received warm commendation, and we were pleased to have these honored guests remain throughout the sessions and take part in the discussions. The annual address by President Marcy, on "The Relations, Responsibilities and Duties of the Medical Profession," was full of practical thought and suggestion and was well received. We admired his courage in expressing his strong convictions concerning the scientific attainments and religious life of the physician, and against the evils of intemperance

and foeticide. We may in a later issue of the JOURNAL refer to his address again. Dr. Marcy made a very acceptable presiding officer. The scientific papers presented were generally of more than the usual excellence, and one of the marked features of this annual meeting was in giving time for a more thorough discussion of some of the papers. Most of the papers read, and also of the discussions, were by members of our Society, the exceptions being: papers by Drs. J. H. Musser, J. B. Deaver and R. H. Wilson, of Philadelphia, discussions by Drs. B. F. Baer, and C. P. Noble, of Philadelphia, and Dr. A. Vander Veer, of Albany, N. Y.

The business of the Society conducted by the House of Delegates, occupied considerable time and was transacted with due deliberation and harmony. The consideration of many of the officers' and committee's reports by the Trustees before presentation to the House undoubtedly saved much valuable time, but we would suggest, for consideration hereafter, that many of the reports are too long and the Trustees might in many cases authorize an abstract for presentation to the House of Delegates, and new matter introduced into the House which is likely to consume much time might be referred to the trustees to digest and report, as more time is needed for the scientific work of the General Session. The treasurer's report showed a balance of nearly four thousand dollars cash on hand besides about \$3,000 of bonds. The recording secretary's report showed the necessity of more care and promptness on the part of the secretaries and treasurers of the County Societies, and the need of some changes in the By-laws. The Committee of Honorary Membership reported in favor of the election of Dr. Albert Vander Veer, of Albany, N. Y., as an honorary member and he was unanimously elected. The Committee on Publication reported that the JOURNAL had cost the Society at least \$200 less than the volume of "Transactions" formerly did and was giving much better satisfaction; also that the number of pages of the

JOURNAL each month would be increased. The Committee on Legislation reported the success of their work in behalf of pure foods and drugs and against the demands of the Osteopaths for a separate board of examiners, also their plans, in outline, for the coming year's work. The committee, very properly, received warm commendation of their work. The report of the Committee on Medical Defense was laid over until next year for action.

Dr. Edward J. Ill, of Newark, was elected President of the Society. Drs. D. St. John, B. A. Waddington and T. H. MacKenzie, Vice-Presidents. The former efficient Recording and Corresponding Secretaries and Treasurer were re-elected.

The By-laws were amended as follows: Changing the beginning of the fiscal year of the Society and of the JOURNAL from July 1st to June 1st; requiring County Society secretaries and treasurers to send in their annual reports to the secretary and treasurer of the State Society two weeks before June 1st; making the dues of the State Society of new members joining the county societies from June 1 to December 1, two dollars and from December 1 to the following June 1 one dollar, to be paid to the treasurers of the State Society at once in order that the new members may receive the JOURNAL and be certified to the American Medical Association as in good standing. and also making the quorum of the House of Delegates twenty *members* instead of twenty *annual delegates*. The Hotel Cape May, Cape May City, was chosen as the place for the next annual meeting of the Society and June 23rd-25th as the time.

The Annual Dinner, on Wednesday evening at Price's Hotel, Pleasure Bay, was a most enjoyable occasion, about 350 members and their male guests and 200 ladies being present to partake of the "clam-bake" which even exceeded in style and bounty those usually served at this hotel. The seven toasts on "The State of New Jersey," "Her Educational Institutions," "Expert Testimony," "The Relation of the Medical Profession to the Clergy," "High Ideals for

the Profession," "The State Society, Its Past, Its Present, Its Future," and "The Ladies," were responded to respectively by Dr. Walter B. Johnson, of Paterson, (in place of Gov. Stokes, who sent regrets that pressing legislative business detained him), Dr. James M. Green, of State Normal Schools, Trenton; Judge Charles G. Garrison, of Camden; Rev. H. M. Gessner, of Atlantic City; Prof. Howard A. Kelly, of Johns Hopkins University, Baltimore; Dr. Enoch Hollingshead, of Pemberton, and Dr. D. C. English, of New Brunswick. There has been expressed by some present a strong desire that at least abstracts of these addresses should be printed in the JOURNAL, and they will appear in the Supplement containing the Minutes of the Society to be issued later.

We cannot close this brief and imperfect review of the annual meeting without giving credit to the Committee on Scientific Work and the Committee on Arrangements. The former gave us an excellent program of most acceptable orations, papers and discussions. The latter did all in their power to provide for our entertainment and comfort. The change in place of meeting at a late day, which gave little time for preparation and the difficulty the committee experienced in finding hotel accommodation at our seaside resorts at short notice, before the regular hotel opening time, made their work no easy task. We could not expect under the most difficult problems that confronted them to secure the accommodation amid luxurious surroundings that an Hotel Cape May offered, or even a modest hotel might give with sufficient time to prepare for our comfort. All the members of these two committees deserve our thanks for their faithful laborious work. We believe special mention is due to Dr. N. L. Wilson, of the former, and to Drs. Mecray and Bennett, of the latter committee.

TO IMPROVE OUR JOURNAL.

With this number we begin Volume IV of the JOURNAL, which on account of the change in the By-laws of our Society making the fiscal year of the Society and also of the JOURNAL begin June 1st instead of July 1st will contain only eleven monthly issues. The editor returns his sincere thanks to the Board of Trustees for its action expressive of appreciation of his past services when they recently reappointed him for the ensuing year.

The election of Dr. E. J. Ill as President of the Society has, we regret to say, resulted in the loss of his active service as a member of our Publication Committee, but a most satisfactory appointment was made in filling the vacancy by the selection of Dr. Ellis W. Hedges, of Plainfield.

As we have before intimated, we were greatly handicapped the past year not only by the strike in our printer's office, but by the rigid economy our Publication Committee was compelled to observe on account of the reduction of the annual dues of the Society to one dollar, which required a reduction in the number of pages of the JOURNAL. With the restoration this year of the usual two dollars dues, the Board of Trustees unanimously approved our recommendation of an increase in the number of pages.

We shall endeavor to make the JOURNAL this year more valuable and serviceable to our members than it has been in the past, but we wish to impress upon our members that the full success of our endeavors depends very largely upon their hearty co-operation. We especially emphasize the great importance of prompt and full reports from the Reporters and Secretaries of our County Societies. We also most urgently request the Secretaries of local medical societies and organizations which are closely related to our profession, or in the work and conduct of which physicians take conspicuous part, to send reports to the editor of their transactions. We submit that it is not encouraging to the editor to see reports in the *A. M. A. Journal* or the New York and Philadelphia journals or newspaper of

Please notify Dr. Chandler promptly if any names or addresses in the Official List are incorrect.

medical societies' meeting, when no report has been sent to *our own* JOURNAL. We have—and we believe every member of our Society should have, a just pride in our State and especially in the Medical Society of New Jersey—the oldest in our country with a record surpassed by none. To maintain and even exceed that record should and will be our earnest endeavor. Believing (and wishing our sister societies to see that our belief is well founded) that the members of our profession in New Jersey are doing their share in the advancement of the science and art of medicine in its various branches, we desire that their JOURNAL shall set forth the good work they are doing in private practice, in our hospitals, dispensaries, State institutions and local organizations, as well as in shaping legislation for the protection of the lives and health of our citizens, in the promotion of public hygiene, and the results of their scientific study and investigations as reported in our County and local societies. We desire also prompt notification of the death of every physician with brief obituary notes, and of personal items of interest to the profession.

Messrs. Reporters and Secretaries, State Society Officers and Members, we kindly, urgently ask you, each and all, to recognize your part in the effort to make the JOURNAL worthy the Society and the profession it represents. Your editor will appreciate your faithfulness and will thank you, as he has and again does those who, in the past, have rendered valuable service—not to him but to the Society which is worthy every member's best endeavors.

THE PHYSICIAN AND THE MEDICAL PRESS.

The Oration on Medicine by Dr. Morris Manges, of New York City, on "The Physician and the Medical Press," delivered at the annual meeting of our Society, is worthy the careful consideration of every member of the profession. The editor of this JOURNAL is in fullest sympathy with the sentiments expressed. We have not heretofore been indifferent to the responsibilities which

attach to the management of a medical journal concerning the nostrum evil and other wrongs from which the profession and the public alike suffer.

We have freely expressed our judgment concerning the members of the profession and medical and religious journals that countenance and support nostrums, by using, recommending, prescribing or advertising them. The determined stand taken by our Publication Committee and the editor is too well known to need comment at this time. We will simply add that there will be no departure from our past course as long as the JOURNAL remains in the hands of those at present in charge.

The columns of this JOURNAL will ever be open not only to every member of the profession who has a communication on any topic, including new drugs and their efficacy, which is calculated to improve or interest the profession, but also to any layman whose message rings as true to the highest interests of the profession and of humanity as have those of Messrs. Edward Bok, Samuel Hopkins Adams and Prof. John B. Smith.

THE AMERICAN MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

The fact that the American Medical Association has met within the bounds of our State for the third time within seven years shows that its members are satisfied with the facilities and attractions that our State affords for a successful as well as enjoyable meeting. Atlantic City is surely an ideal place of meeting for largely attended conventions; the grand old ocean, the excellent hotel accommodations and the hospitality of its citizens are calculated to favor large attendance, to satisfy and captivate the delegates and to encourage the desire to return. It was a cause of deep regret that the unseasonable weather the few days preceding the date of meeting prevented what promised to be a phenomenal attendance, far exceeding that at Boston last year, which was the largest of the series of annual sessions, and yet 3701 members registered this year.

But while Boston has the best record of attendance, it is the general concensus of opinion that the meeting this year exceeded any previous ones for general excellence of program, of representative men and of large attendance at the meetings of the various Sections; e. g., at the Section on Laryngology and Otology the attendance at times was 500, while at the joint meeting of the Sections on Practice of Medicine, Surgery and Anatomy, and Pathology and Physiology 2500 gathered to hear the Symposium on Goitre. The latter fact indicates deeper interest in the scientific work of the profession and the consequent bright outlook for future advancement. The Association has been very fortunate in the selection of its presiding officers—last year Dr. W. J. Mayo, this year Dr. J. D. Bryant, and for the coming year Dr. H. L. Burrell. A number of the members of our State Society took part in the proceedings, President Marcy delivered an excellent address of welcome, Drs. Emery Marvel, P. A. Harris, R. C. Newton and Alex. McAllister, presented papers, and among those discussing papers were Drs. W. P. Eagleston, C. J. Kipp, N. L. Wilson and E. Marvel.

The business of the Association, transacted by the House of Delegates—a small body, but this year with larger and more regular attendance than ever before, was conducted with more than usual despatch, with harmony and, we believe, wisely—for the highest interests of the profession as well as the strengthening and growth of the Association. The quack proprietary medicine interests, in combination with the discredited medical schools, cheap fee insurance and other antagonistic forces, met with a crushing defeat, and the good work of the JOURNAL, the Council of Pharmacy and Chemistry, the Council on Education, the Committee on Insurance and of cleanness and honesty in advertising and dispensing was sustained by an overwhelming majority. The treasurer's report showed remarkable financial prosperity, the balance on hand January 1, 1907, was: Cash, \$11,697.38; bonds, \$39,000; total, \$50,697.38. There

has also been a wonderful growth in membership—from 7,997 January 1, 1899, to 26,255 January 1, 1907; the subscriptions to the *Journal* during the same period, from 2,453 to 20,166.

We have taken some pains to examine the reports to ascertain the number of members of the American Medical Association from New Jersey and the number of subscribers, and find that on January 1, 1907, there were 575 of the former and 310 of the latter, or 885 in all, which is 37.9 per cent. of the 2,332 physicians reported as residing in New Jersey. We believe the latter number is understated and that the percentage does not exceed 30 per cent. There was a gain during 1906 of 111 from New Jersey, and we note the names (reported elsewhere in this issue of our JOURNAL) of 39 additional during May of this year.

We ask our members to consider the advantages to themselves personally of membership in the A. M. A. and to investigate as to the value of its *Journal* to every physician who desires to keep posted as to the advance in the science and art of his profession. But we ask him also to consider the mighty influence this Association is exerting in raising the standards of the profession; in overthrowing the low grade medical colleges and in advancing the curriculum and methods of teaching of the better and even the best of them; in its contest against the quack proprietary medicines and in behalf of adequate insurance fees; in its fight for pure foods and drugs and such other legislation as demonstrates that the medical profession stands for the protection of the life and health interests of humanity.

We believe that when the A. M. A. shall receive into its membership all reputable physicians who desire the accomplishment of the high aims and ends towards which it is striving, its influence will be vastly greater—yes, that it will be irresistible.

The next annual meeting of the A. M. A. will be held in Chicago, Ill., in June, 1908.

VACANCY IN DISPENSARY STAFF.

There is a vacancy in the medical department of the Dispensary Staff of the Orange Memorial Hospital. Application should be made in writing to the Secretary, Dr. Henry M. Chandler, 408 Main St., Orange N. J. Applicants will please state their full name and address, also their Medical College and year of graduation.

Current Medical Literature.

Eyestrain in School Children.—W. S. Cornell has made a study of this subject as concerns school children in Philadelphia. In 1156 children he found normal vision in 66 per cent. The test consisted simply in distance vision with the Sneller types with the best natural light obtainable. Of the 34 per cent. of defectives about 6 per cent. had only one-half normal vision or less. About 70 per cent. of the defectives were not wearing glasses. This state of affairs is due, he thinks, first, to the medical profession who ignore the fact that the vast majority of reflex headaches in children are due to eyestrain, and who ignore the round-shouldered, delicate children, making no systematic effort to find out the cause of their condition; second, to the teaching profession, whose knowledge of anatomy and physiology is impractical. They spend much time in telling the children about the effects of alcohol on the stomach and liver and almost no time at all in looking out for departures from normal of the needful sense-functions, and, third, to the parents who assume an attitude of indifference and resentment. Cornell finds that girls suffer more than boys from eyestrain, and that there is a direct relation between poor vision and scholarship.—*N. Y. Medical Journal*, June 1, 1907.

Treatment of Some Eye Diseases by the General Practitioner.—In the *Virginia Medical Semi-Monthly* Wilkinson discusses this subject and reviews the diagnostic points of the four conditions mentioned in his paper.

Conjunctivitis.—Always a discharge; pupil always dilates freely; cocaine dilates pupil; sensation of burning, pricking and of foreign body; some photophobia.

Ulcer of Cornea.—Usually a discharge; great photophobia; the continuity of cornea has been broken at some point; there is usually a decidedly white, ulcerated spot. When there is any doubt as to whether the cornea is involved, this can be determined by instilling first a solution of cocaine, 2 per cent., followed in two to five minutes by an instillation of fluoresceine, 1:100, followed again by a drop of cocaine. If there is an ulcer this will stain it yellow, and it becomes very distinct.

Iritis.—Small, usually ragged, irregular pupil; discolored iris, deep-seated inflammation; pupil not dilatible with 2 per cent. solution of cocaine; pain in eye and temple, worse at night; little or no discharge; normal tension; some photophobia.

Glaucoma.—Hard eye; great pain in eye and temple, sudden in onset; steamy cornea, slightly dilated pupil, but regular. Shallow anterior chamber.

In conclusion he offers a few don'ts in ophthalmology:

1. Don't treat an eye until you know what is wrong with it.

2. Don't use a poultice of any kind on the eye. Poultices have done more damage than they have ever done good. They mask the symptoms and cause rapid ulceration and breaking down of tissues.

3. Don't use atropine in the eyes of persons above the age of forty years, unless you are absolutely certain that you have a case of iritis.

4. Don't use acetate of lead in ulcers of the cornea. You will get a lead deposit in the cornea.

5. Don't use cocaine in ulcers of the cornea. It causes a degeneration of the epithelial membrane and invites ulceration.

6. Don't treat your chronic headache and migrainous patients for years with pills, purgatives, and coal-tar preparations, but send them to a competent oculist and have them fitted with glasses.

Cysticercus Cellulosæ in the Tongue of a Child.

—L. De Gaetano describes a rare case of cysticercus cellulosæ in the tongue of a child of ten years. The child had associated with dogs and other animals, but there had been no symptoms of tenia in the child or any other members of the family. For two years there had been noticed a nodule on the left side of the tongue, which latterly had grown rapidly until it was the size of a large nut. It was covered by normal mucous membrane, hard and embedded in the muscle of the organ. When enucleated it was found to constitute a cystic tumor with a firm capsule, from which on cutting there flowed a limpid liquid, and the internal surface was covered by a yellowish-white membrane, at one portion of which was located a small white mass, the egg of the tapeworm. The larva must have reached the stomach or duodenum, when it was liberated by the digestive juices and the animal must have migrated to its permanent location by way of several other organs.—*Rivista de Clinica Pediatrica*.

The Treatment of Phthisis Night Sweats.

By Dr. Wilke, Medico, 1906, No. 52.—The old remedies for nocturnal sweats in phthisis act only symptomatically. Since the sweats must be regarded as a biochemic reaction of the organism against the invasion of the blood stream by toxic substances, a causal remedy must be able to depose the bacterial toxins and thus remove the entire symptom-complex—the chills in the afternoon, the evening fever and the night perspiration. *A priori*, such an effect is to be anticipated from collargolum, as it has been shown that it acts katalytically on bacterial products.

Five phthisis patients in the second stage, with severe cough, muco-purulent expectoration and heavy night sweats, four of whom had moderate or high fever, received a tablespoonful of a 1 per cent. collargolum solution four times daily. After the use of ½ dram collargolum, fever and sweats disappeared and have not returned to this date, two months later. The importance of this result with reference to nutrition and strength is evident. When severe enteritis hinders absorption, inunction or intravenous injection of collargolum is preferable to its use by mouth. Collargolum does not act upon localized pus foci; therefore its use also has diagnostic value.

Collargol in Septicemia, Scarletina, Typhoid Fever, Etc.

—In a paper read before the San Angelo District Medical Association (*Texas State Journal of Medicine*, March, 1907), Dr. I. L. Van Zandt of Fort Worth reviews some of the publi-

cations on collargol and records his own experience with it in septicemia, scarlatina, phlebitis, erysipelas, bubo, paronychia, acute salpingitis and exacerbations. He also gave it in thirteen cases of typhoid fever, with an average of 19.8 days from the first to the last visit. This includes one with intercurrent pneumonia and two who suffered a setback from excitement and overeating. In two cases the temperature had fallen to 99 degrees. When the remedy was discontinued the temperature remained stationary for a few days and then again rose till collargol was resumed, whereupon the fever disappeared in three days. In most cases there was marked improvement with general well-being in two or three days after beginning of treatment, the fever sometimes coming to a very abrupt termination.

Vertigo.—In the *Kansas City Medical Index-Lancet* for November, 1906, Robinson says that the treatment of vertigo is the treatment of the morbid state which is causing the vertigo. If ocular, correct the error of refraction or the muscle incoordination. If gastric, correct the digestive disturbance. If hemic, correct the morbid state of the blood or the weak heart action, or, as far as possible, stop movements that bring on the vertigo in anemia resulting from arterio-sclerosis. In incurable brain disease, in which vertigo is a symptom, drugs such as the bromides, which decrease the irritability of the equilibratory centers, will be indicated. Aural vertigo resulting from impacted cerumen in the external auditory canal will disappear when the cerumen is removed. Curable middle-ear disease occasionally causes vertigo, and the vertigo disappears when this morbid state is cured. All forms of reflex aural vertigo can be relieved by correcting the morbid state causing the vertigo. Vertigo resulting from the morbid state of the labyrinth is the most difficult to treat successfully. There are many reasons for believing that these result from irritation of the vestibular nerve endings. If there be degeneration of any of the labyrinth structures, when the degeneration is complete the vertigo ceases. The bromides give considerable relief in these cases by lowering the irritability of the coordinating centers. In the very severe cases destruction of the entire middle ear may be done with satisfactory results. Charcot recommended large doses of quinine in chronic Ménière's disease. Church recommends pilocarpine in acute cases, and in obstinate chronic cases with impaired hearing removal of the malleus and incus and immobilization of the stapes will often give relief.—*Therapeutic Gazette*, April 15, 1907.

Cells in the Exudate of Cerebrospinal Meningitis.—M. Speroni (*La Presse. Med.*, Feb. 23, 1907) has made examinations of the exudate in patients attacked with epidemic cerebrospinal meningitis. The fluid may be scanty or large in amount. It contains fibrin in small quantities. All the cellular elements of the blood are found in the exudate. Polynuclears with entrophilic granulations predominate, more or less degenerated, and many of them containing the diplococcus intracellularis meningitidis. Mononuclear leukocytes, large and small, are present, the large cells being few in number. The protoplasm is basophilic. They have a phagocytic action on the leukocytes, red blood cells, detritus, and bacteria. There are more or less red blood corpuscles, and yellow amorphous pigment. Fibroblasts are found, originating in the proliferation of the adventitia

of the vessels, especially the large arteries. They are phagocytic. While the leukocytes destroy the bacteria, the proliferated cells remove the debris of the struggle from the tissues.

Sudden Death at the Climacteric.—E. Pratt reports the case of a woman of forty-five years to whom he was hastily summoned, but who was found dead on his arrival. Inquiry developed the fact that inside of two hours she had "felt queer," vomited, was faint, and one hour or so later the hands suddenly clenched, the face grew dusky, nails were discolored, she felt very cold, became unconscious, gave three blowing expirations, and then seemed as if dead. For the previous year she had suffered from occasional severe headache; for the last six months she had been subject to "fainting turns," with frequent retching, such attacks lasting half an hour to an hour, when she would be all right again; the attacks always occurred early in the morning. The frequent flushes and cold sweats of the climacteric were experienced, and irregular catamenia, of late every two weeks or so, not much loss, but extending over a longer period than normally. The last menstrual period was a week previous to the fatal attack. She was a healthy, cheerful, bright, and happy woman. She had borne seven children, five now living. Her father died suddenly at the age of sixty. The autopsy revealed nothing, all organs and structures being normal, with no signs of internal hemorrhage or of poisoning. The author notes that attacks similar to those just mentioned are common enough at the climacteric, but he believes that such an attack originating in the genitalia might so act reflexly that the balance would turn toward death instead of loss and recovery. He gave, at the inquest, as the cause of death "asthenic syncope," and has been unable to find any record of an exactly similar case.—*British Medical Journal*, May 25, 1907.

Congenital Paludism.—N. Pezopoulos and J. P. Cardamatis (*Arch. de Med. des Enf.*, Jan., 1907) state that when the malarial parasite is found in the blood of pregnant women it is not in that of the new-born child or the fetus after abortion. The authors have examined the blood of six new-born children, of the mothers, and of the placenta after birth. They observed many plasmodia in the blood of the mothers, but none in the new-born children. Parasites were found in the blood from the maternal side of the placenta, but none in that on its fetal side, nor in the umbilical cord. In the placenta after abortion there were no parasites. Hence it may be stated that the plasmodia are found only in the maternal circulation. While they stay for long periods in the placental lacunæ, owing to the slowness of the circulation there, they do not pass through into the fetal circulation, nor infect the fetus.—*American Journal of Obstetrics* (Wood & Co.).

Complications of Pregnancy, Labor and Puerperal State, Due to Wandering Spleen.—Carl Heil (*Arch. f. Gyn. Bd. 91, H. 1*) states that wandering spleen may be a cause of complications of pregnancy, labor, or the puerperal state, although this seems to be rare. In pregnancy such complications may cause difficulty in diagnosis. Symptoms of pressure on the various abdominal organs may be troublesome. Pain may be a marked symptom. Extirpation of the spleen may be done during pregnancy without any bad results

to the patient, and without interrupting the pregnancy. Torsion of the pedicle of the spleen may cause severe symptoms. During labor the spleen may become dislocated into the small pelvis and cause symptoms due to pressure after labor. On the other hand, as in the author's case, no untoward effects may be observed during any of these periods, and delivery may occur normally at term, followed by a normal puerperal state.—*Amer. Jour. of Obstetrics and Diseases of Women and Children*, May, 1907.

Extrauterine Pregnancy with Living Child.

—G. Heinrichus (*Finska Läkaresällsk. Handl.*, Tillaggsäfte, 1906) reports a laparotomy for extrauterine pregnancy performed only a few weeks before term by which a living child was secured, weighing at birth 2050 grams and twenty-six days later 3050 grams.—*Amer. Jour. of Obstetrics and Diseases of Women and Children*, May, 1907.

Repeated Extrauterine Pregnancy.—L. Gratschoff (*Finska Läkaresällsk. Handl.*, Tillaggsäfte, 1906) records a case of repeated ectopic gestation in the left tube at an interval of sixteen years, during which the patient has given birth to seven full-term children.—*Amer. Jour. of Obstetrics and Diseases of Women and Children*, May, 1907.

Acute and Chronic Appendicular Pain: Medical and Surgical Treatment.—A general consideration of this subject is made by Saint-René Bonnet. He gives the histories of (1) a typical case of chronic appendicitis without mucomembranous enterocolitis cured by medical treatment alone, (2) a case of mucomembranous colitis in the course of which painful secondary reflexes arising from the appendix quite disabled the patient and called for surgical intervention, and (3) a case of chronic mucomembranous enterocolitis in the course of which acute appendicular pain, due to a supervening cause—a large appendicular calculus—necessitated operation, which was successful. The author calls attention to the following causes which have induced medical men to restrict surgical treatment (1) in the course of operations, the appendix has often been found to be quite normal or only slightly involved. It seems, therefore, quite difficult to consider it the cause of the trouble which had necessitated the operation. (2) Sometimes when the appendix, whether healthy or not, has been removed, chronic pain persists just as before; even fresh attacks similar to that of relapsing appendicitis occurs. (3) In spite of the general tendency to resort to surgical treatment, there are many cases where the symptoms seem to point to a fatal termination, but in which, however, recovery is obtained without surgical interference. (4) These strictly medical cures assume greater importance when the results of operating during the acute period of the affection, with all the risks it entails become better known. These facts at first puzzled both physicians and surgeons, but most of them were explained when careful studies of the morbid syndrome, now so frequently met with and which is called mucomembranous enterocolitis, were made, the intestinal symptoms of which may be thus tabulated. The author states that in well-characterized mucomembranous enterocolitis we find chronic constipation with or without occasional attacks of diarrhea; diarrhea, which may become chronic, and is observed in the place of chronic constipa-

tion more than is generally supposed; spasmodic contractions of the large bowel which alternate or coexist with dilatation of one or more of its portions; persistent pain which becomes intense during the acute periods of the affection; passage of mucus and casts with occasional intestinal hemorrhages, and in some cases abundant evacuations of intestinal gravel. He adds that there are two important signs which must always be kept in mind, for they are practically never absent. Firstly, when paroxysms of mucomembranous enterocolitis are localized or predominate in the right iliac fossa at, and around, McBurney's point, they present symptoms which may resemble exactly those of an acute attack of appendicitis, and when there are no acute paroxysms of the disease there may be persistent pain which simulates that of chronic appendicitis. As in true appendicitis, the pain, whether acute or chronic, is of a shooting, stabbing, or colicky character, or is replaced by a more or less marked sensitiveness in the right iliac region. This pain is increased by movement. Secondly, experience teaches that when in the course of supposed acute appendicitis or of chronic appendicular pain, mucous casts are passed in the stools the physician is bound to feel entirely reassured as to the nature of the trouble, and is enabled to give a good prognosis.—*Medical Record*, June 15, 1907, from *The Lancet*.

Irritation of the Epiglottis for Resuscitating the Apparently Asphyxiated.

—Tickling the epiglottis with the finger has been found by Friedenthal to be a highly effective method of resuscitating those who are in a state of asphyxia from drowning, anesthesia, etc. He describes the procedure in this way. The method, he says, consists in introducing the hand into the mouth of the patient until you feel the epiglottis and then moving the index finger to and fro over the epiglottis. Thus a very powerful effect is exercised directly upon the nerves to be considered in this connection, viz., the glossopharyngeal supplying the anterior surface of the epiglottis and the inner branch of the superior laryngeal nerve supplying the posterior surface of the epiglottis, the base of the tongue, etc. The epiglottis is that organ of the human body which is particularly capable of inducing reflex action on the least irritation, and we all know how much difficulty we often have to avoid this irritability in laryngeal work. And this is just what we need in asphyxial conditions whatever be their cause.—*St. Louis Medical Review*.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Bureau of Vital Statistics, Monthly Statement—May, 1907.

The number of deaths reported to the Bureau of Vital Statistics during the month ending May 15, 1907, was 2,988, a decrease of 665 from the previous month. There were 481 deaths of infants aged less than one year; 256 deaths of children between one and five years, and 895 deaths of persons over sixty. The number of deaths from typhoid fever (17) shows a decrease of 16 from the previous month, while the average number of deaths from this cause for the preceding ten months is 37. Tuberculosis of the lungs caused 359 deaths, which is slightly above the average (298) for the past ten months. The deaths from diphtheria (55) corresponds with

the monthly average. Cancer (122) shows a slight increase over the average number of deaths from this cause. The continuous increase of deaths from cancer during the past twenty-seven years is shown, per 10,000 inhabitants, by the following figures: 1879, 3.70; 1880, 3.75; 1881, 3.88; 1882, 3.37; 1883, 3.81; 1884, 3.87; 1885, 3.89; 1886, 4.15; 1887, 4.21; 1888, 4.45; 1889, 4.11; 1890, 4.41; 1891, 4.34; 1892, 4.55; 1893, 4.69; 1894, 4.63; 1895, 4.60; 1896, 4.71; 1897, 4.33; 1898, 4.70; 1899, 5.10; 1900, 4.84; 1901, 5.43; 1902, 5.24; 1903, 5.61; 1904, 5.46; 1905, 5.98; 1906, 6.32. The accepted explanation of the increased mortality from this cause appears to be, in part, the more accurate diagnosis of tumors affecting the internal organs, and the diminution of deaths in early life, thus giving an increased death rate among the aged, for the greatest number of deaths from cancer occur between the ages of sixty and seventy.

Cerebro-spinal meningitis caused thirty-five deaths, the average for the preceding ten months having been twenty-four. The infectious organisms of this disease are carried in the nose and throat in the case of persons who are not sick, but who have been exposed to the infection, and the dissemination of the infection may therefore be through the agency of persons who are not suspected to be affected with the disease. The infectious organisms are probably distributed as in diphtheria by kissing, by suspended droplets of moisture which are liberated in the acts of speaking, coughing, sneezing, etc., and, therefore, isolation of the patient is of first importance, and no one except the necessary attendants should be admitted to the sick room. It has been found that the infectious organisms die out quickly when they are deposited upon clothing, bedding, furniture, etc., and the spread of the disease is doubtless mainly due to the direct exposure of susceptible persons to contact with an individual who is carrying the cocci upon the mucous surfaces of the throat or nose.

Pneumonia is charged with 315 deaths, the average for the past ten months having been 249. The recorded deaths in New Jersey from pneumonia, per 10,000 inhabitants, during the six years ending December 31, 1906, were as follows: 1901, 13.18; 1902, 12.30; 1903, 13.03; 1904, 16.93; 1905, 12.89; 1906, 14.11.

Thirty-seven deaths are reported from suicide, the average monthly number having been twenty-six. Bright's disease caused 206 deaths, the average for ten months having been 182.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending May 15, 1907, and also the number of deaths reported from certain selected causes compared with the average for the previous ten months.

Food and Drugs—During the month ending May 31, 1907, 342 samples were purchased for examination, under the direction of the State Board of Health. Of these we give the following: 169 specimens of milk, 14.2 per cent. were adulterated; 21 specimens of butter, 42.8 per cent. adulterated; cheese, 25 specimens, 32 per cent. adulterated; catsup, 6 specimens, 33.3 per cent. were adulterated.

A subcutaneous tumor with a history of puncture or the presence of a minute scar in the overlying skin, usually means that one is dealing with an inclusion—or so-called Ranvier cyst.—*Amer. Jour. of Surgery.*

Book Review.

THE PRINCIPLES AND PRACTICE OF DERMATOLOGY. For Students and Practitioners; by William Allen Pusey, A. M., M. D., Professor Dermatology in the Univ. Ill., Etc., Etc. New York and London. D. Appleton & Co., 1907. Full Illustrated. \$6.00.

Dermatologists of the present day recognize the close connection between diseases of the skin and the conditions of the general system—the cutaneous manifestation being merely the outward expression of the internal disturbance. Dr. Pusey therefore devotes considerable space to THE FUNDAMENTAL PRINCIPLES OF DERMATOLOGY, ANATOMY AND PHYSIOLOGY OF THE SKIN, GENERAL ETIOLOGY, PATHOLOGY, SYMPTOMATOLOGY AND TREATMENT OF DISEASES OF THE SKIN.

Especial emphasis is laid on the *general treatment*, often to the entire exclusion of local applications. The text of this work is clear, and the illustrations are numerous, correct, and wonderfully expressive for uncolored plates. The perusal of the book will be a pleasure and benefit to every physician.

PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL OF PHARMACY AND CHEMISTRY.

(Continued.)

CHLORALAMID.

A name applied to Chloralformamidum, U. S. P. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin, Germany. (Schering & Glatz, New York.)

CHLORETONE.

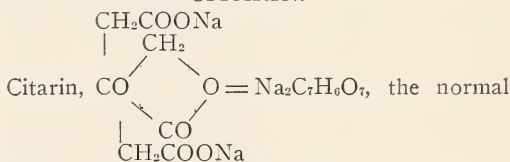
A name applied to chlorbutanol, which see. Manufactured by Parke, Davis & Co., Detroit, Mich.

CHLORETONE INHALANT.

A solution of chloretone, camphor, menthol and oil of cinnamon in liquid petrolatum.

Actions and Uses.—An anodyne, antiseptic, and emollient solution for use by inhalation as a very fine spray or nebula. Manufactured by Parke, Davis & Co., Detroit, Mich.

CITARIN.



sodium salt of anhydromethylene-citric acid.

Actions and Uses.—This is one of the compounds which it is claimed increase the elimination of uric acid by forming very soluble compounds with that substance. It has been recommended for gout and chronic rheumatism. Dosage.—1 to 2 Gm. (15 to 30 grains), largely diluted with water. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. (Continental Color & Chemical Co., New York.)

COLLAGOL.

Collagol is a water-soluble, allotropic form of metallic silver, said to contain 85-87 per cent. of silver, and a small percentage of albumin with products of its oxidation.

Actions and Uses.—Collagol is a general antiseptic and germicide which can be introduced into the system without causing either local reaction

or general poisonous effects. Dosage.—In most cases it is best employed locally in the form of a 15 per cent. ointment; otherwise, in carefully filtered solutions, varying in strength according to the intended use; 2 per cent. to 5 per cent. for intravenous injections; 1/50 per cent. to 1 per cent. solutions for washes; 5 per cent. dusting powder, prepared with finest clay; in the form of bougies containing 0.2 Gm. (3 grains) and vaginal suppositories and tampons each containing 0.05 Gm. (3/4 grain), for parenchymatous injections in 0.5 per cent. to 1 per cent. glycerin solutions. Internally a solution of 1:500 to 1:100 is given freely in teaspoonful doses added to the food, in infectious gastric and intestinal diseases. It is also given in tablets containing 0.06 Gm. (1 grain). Manufactured by The Helden Chemical Works, Radebeul, Germany, and Garfield, N. J. (Schering & Glatz, New York.)

COLLARGOL OINTMENT.

Collargol Ointment is an ointment containing 15 per cent. of collargol.

Actions and Uses.—These are described under "Collargol," which see. Manufactured by The Heyden Chemical Works, Radebeul, Germany, and Garfield, N. J. (Schering & Glatz, New York.)

CREOSOTAL.

A mixture of carbonic acid esters, analogous to guaiacol carbonate, prepared from creosote.

Action and Uses.—Creosotal has the same action as creosote, but is claimed to be non-toxic and devoid of irritant properties. It is recommended as a substitute for creosote for internal exhibition in tuberculosis, pneumonia, and as an intestinal antiseptic. Dosage.—From 0.3 to 2.0 Gm. (5 to 30 grains) for children, to 1 to 4 Gm. (15 to 60 grains) for adults in milk, coffee, wine, cod-liver oil or emulsion. Externally it may be applied undiluted. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. (Continental Color & Chemical Co., New York.) Fabrik von Heyden, Radebeul, near Dresden.

CRESYLONE.

A name applied to a preparation essentially similar to Liquor Cresolis Compositus, U. S. P. Prepared by Parke, Davis & Co., Detroit, Mich.

CNPRO-HEMOL.

Cupro-hemol is hemol containing 2 per cent. of copper in organic combination.

Actions and Uses.—Cupro-hemol is said to be useful in tuberculosis, scrofula, anemia, chlorosis; etc. Dosage.—The maximum dose is 0.5 Gm. (8 grains). Manufactured by E. Merck, Darmstadt, Germany. (Merck & Co., New York.)

DIABETIN.

A pure, crystallized fructose (levulose), $\text{CH}_2\text{OH}.\text{CHOH}.\text{CHOH}.\text{CHOH}.\text{CO}.\text{CH}_2\text{OC} = \text{C}_6\text{H}_{12}\text{O}_6$, absolutely free from dextrose (ordinary glucose).

Actions and Uses.—Levulose is metabolized in the body by other agencies than those that act on dextrose and most of the other sugars and appears to be more completely utilized by the diabetic organism than the other sugars. It is recommended for the nutrition and for sweetening the food and drink of diabetics, in pulmonary tuberculosis, infantile malnutrition and marasmus. Dosage.—It is given in diabetes in daily quantities of 30 to 60 Gm. (1 to 2 ounces); in grave forms of the disease the amount is reduced to from 12

to 24 Gm. (3 to 6 drams) daily. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin. (Schering & Glatz, New York.)

DIONIN.

Dionin, $\text{C}_{17}\text{H}_{17}\text{NO}(\text{OH})(\text{OC}_2\text{H}_5)\text{HCl} + \text{H}_2\text{O} = (\text{C}_{19}\text{H}_{24}\text{O}_3\text{ClN} + \text{H}_2\text{O})$, the hydrochloride of the ethyl ester of morphine.

Actions and Uses.—It is claimed that this compound acts like morphine without producing constipation, nausea or lassitude. It is the conclusion of some good observers that it possesses no advantage over codeine. Applied to the eye, it causes a local vasodilation, leading to acute conjunctival edema. Dionin is recommended to relieve pain, especially in respiratory affections, as an antispasmodic in whooping-cough, for insomnia and externally in the treatment of corneal affections, conjunctivitis, iritis, etc. Dosage.—0.015 to 0.06 Gm. (1/4 to 1 grain). Externally it is applied in 10 to 20 per cent. solutions. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York.)

DIURETIN.

A name applied to theobromine-sodium salicylate, which see. Manufactured by Knoll & Co., Ludwigshafen, Germany. (E. Merck & Co., New York.)

DENTALONE.

A 30 per cent. solution of chloretone in a mixture of oils of gaultheria, cloves and cassia.

Actions and Uses.—Dentalone possesses pronounced anesthetic properties and is intended for use by dentists in the treatment of exposed nerves in decayed teeth. Prepared by Parke, Davis & Co., Detroit, Mich.

DERMATOL.

A name applied to Bismuthi Subgallas, U. S. P. Manufactured by Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York.)

DUOTAL.

A name applied to Guaiacolis Carbonas, U. S. P. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. (Continental Color & Chemical Co., New York.)

DUOTONOL.

A name applied to a mixture of equal parts of calcium tonol and sodium tonol. (See Tonols.)

Actions and Uses and Dosage.—See Glycero-phosphates. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin. (Schering & Glatz, New York.)

(To be continued.)

Consolidation of Medical Journals.

The *Interstate Medical Journal* (St. Louis) announces the purchase of the *St. Louis Courier of Medicine*, one of the oldest medical journals in the West, and its consolidation with the *Interstate* on July 1. The *St. Louis Courier of Medicine* was established in 1879 by an association of prominent St. Louis physicians. It has always commanded a large following throughout the West and South, and held the respect and esteem of the profession of this country. This merger removes from the field an old and highly esteemed contemporary, and its consolidation with the *Interstate* adds strength and prestige to that periodical. This is the fourth medical journal that has been purchased and absorbed by the *Interstate* during the past few years.

OFFICIAL LIST

OF THE

FELLOWS, OFFICERS AND MEMBERS

OF

THE MEDICAL SOCIETY OF NEW JERSEY,

In good standing July 1, 1907.

FELLOWS.

All persons who shall have been, or may hereafter be Presidents of the Society shall rank as Fellows, and be entitled to all the privileges of delegated members.

The dates represent the year of election as President,

Those marked thus (*) are deceased.

*Robert McKean	1766	*Henry Van Derveer	1836
*William Burnett	1767	*Lyndon A. Smith	1837
*John Cochran	1768	*Benjamin H. Stratton	1838
*Nathaniel Scudder	1770	*Jabez G. Goble	1839
*Isaac Smith	1771	*Thomas P. Stewart	1840
*James Newell	1772	*Ferd. S. Schenck	1841
*Absalom Bainbridge	1773	*Zachariah Read	1842
*Thomas Wiggins	1774	*Abraham Skillman	1843
*Hezekiah Stites	1775	*George R. Chetwood	1844
* * * * *		*Robert S. Smith	1845
*John Beatty	1782	*Charles Hannah	1846
*Thomas Barber	1783	*Jacob T. B. Skillman	1847
*Lawrence Van Derveer	1784	*Samuel H. Pennington	1848
*Moses Bloomfield	1785	*Joseph Fithian	1849
*William Burnett	1786	*Elias J. Marsh	1850
*Jonathan Elmer	1787	*John H. Phillips	1851
*James Stratton	1788	*Othniel H. Taylor	1852
*Moses Scott	1789	*Samuel Lilly	1853
*John Griffith	1790	*A. B. Dayton	1854
*Lewis Dunham	1791	*James B. Coleman	1855
* * * * *		*Richard M. Cooper	1856
*Isaac Harris	1792	*Thomas Ryerson	1857
* * * * *		*Isaac P. Coleman	1858
*Elisha Newell	1795	*John R. Sickler	1859
* * * * *		*William Elmer	1860
*Jonathan F. Morris	1807	*John Blane	1861
*Peter I. Stryker	1808	*John Woolverton	1862
*Lewis Morgan	1809	*Theo. R. Varick	1863
*Lewis Condict	1810	*Ezra M. Hunt	1864
*Charles Smith	1811	*Abraham Coles	1865
*Matthias H. Williamson	1812	*Benjamin R. Bateman	1866
*Samuel Forman	1814	John C. Johnson	1867
*John Van Cleve	1815	*Thomas J. Corson	1868
*Lewis Dunham	1816	*William Pierson	1869
*Peter I. Stryker	1817	*Thomas F. Cullen	1870
*John Van Cleve	1818	*Charles Hasbrouck	1871
*Lewis Condict	1819	*Franklin Gauntt	1872
*James Lee	1820	*T. J. Thomason	1873
*William G. Reynolds	1821	*G. H. Larison	1874
*Augustus R. Taylor	1822	*William O'Gorman	1875
*William B. Ewing	1823	*Jno. V. Schenck	1876
*Peter I. Stryker	1824	*Henry R. Baldwin	1877
*Gilbert S. Woodhull	1825	*John S. Cook	1878
*William D. McKissack	1826	*Alexander W. Rogers	1879
*Isaac Pierson	1827	*Alexander N. Dougherty	1880
*Jeptha B. Munn	1828	*Lewis W. Oakley	1881
*John W. Craig	1829	*John W. Snowden	1882
*Augustus R. Taylor	1830	*Stephen Wickes	1883
*Thomas Yarrow	1831	*P. C. Barker	1884
*Fitz Randolph Smith	1832	*Joseph Parrish	1885
*William Forman	1833	Charles J. Kipp	1886
*Samuel Hayes	1834	John W. Ward	1887
*Abraham P. Hagerman	1835	H. Genet Taylor	1888

FELLOWS.—Continued.

*Beniah A. Watson	1889	Claudius R. P. Fisher	1898
*James S. Green	1890	Luther M. Halsey	1899
Elias J. Marsh	1891	*William Pierson	1900
George T. Welch	1892	John D. McGill	1901
John G. Ryerson	1893	Edmund L. B. Godfrey	1902
Obadiah H. Sproul	1894	Henry Mitchell	1903
William Elmer	1895	Walter B. Johnson	1904
Thomas J. Smith	1896	*Henry W. Elmer	1905
David C. English	1897	Alexander Marcy, Jr.	1906

HONORARY MEMBERS.

*David Hosack, New York	1827	*C. A. Lindsley, New Haven, Conn.	1872
*John W. Francis, New York	1827	*Wm. Pepper, Philadelphia	1874
*John Condict, Orange, N. J.	1830	S. Weir Mitchell, Philadelphia	1876
*Usher Parsons, Rhode Island	1839	Cyrus F. Brackett, Princeton, N. J.	1880
*Reuben D. Murphy, Cincinnati	1839	*Joseph C. Hutchinson, Brooklyn, N. Y.	1880
*Alban G. Smith, New York	1839	Thomas Addis Emmett, New York	1884
*Willard Parker, New York	1842	*Isaac E. Taylor, New York	1884
*Valentine Mott, New York	1843	*D. Hayes Agnew, Philadelphia	1886
*Jonathan Knight, New Haven	1848	*Joseph Leidy, Philadelphia	1886
*Nathaniel Chapman, Philadelphia	1848	Frederick S. Dennis, New York	1893
*John H. Stephens, New York	1848	*John H. Ripley, New York	1893
*John C. Warren, Boston	1849	Virgil P. Gibney, New York	1893
*Lewis C. Beck, New York	1850	*William Pierson, Orange, N. J.	1894
*John C. Torrey, New York	1850	Abram Jacobi, New York	1896
*George B. Wood, Philadelphia	1853	*Virgil M. D. Marcy, Cape May City.	1896
*H. A. Buttolph, Short Hills, N. J.	1854	*Samuel H. Pennington, Newark, N. J.	1897
*Ashbel Woodward, Franklin, Conn.	1861	Alfred A. Woodhull, Princeton, N. J.	1901
*Thomas W. Blatchford, Troy, N. Y.	1886	J. Leonard Corning, New York	1902
*Jeremiah S. English, Manalapan, N. J.	1867	John Allen Wyeth, New York.	1903
*Stephen Wickes, Orange, N. J.	1868	William K. Van Reypen, U. S. N.	1903
*S. O. Vanderpool, Albany, N. Y.	1872	Lawrence F. Flick, Philadelphia, Pa.	1903
*Joseph Parrish, Burlington, N. J.	1872	S. Adolphus Knopf, New York.	1906
*Ferris Jacobs, Delhi, N. Y.	1872	Albert Vander Veer, Albany, N. Y.	1907

OFFICERS.

EDWARD J. ILL, <i>President</i>	Newark	DANIEL STROCK, <i>Cor. Secretary</i>	Camden
DAVID ST. JOHN, <i>1st Vice Pres.</i>	Hackensack	WM. J. CHANDLER, <i>Rec. Secretary</i> , South Orange	
B. A. WADDINGTON, <i>2d Vice Pres.</i>	Salem	ARCHIBALD MERCER, <i>Treasurer</i>	Newark
THOMAS H. MACKENZIE, <i>3rd Vice Pres.</i>	Trenton		

PERMANENT DELEGATES.

ATLANTIC COUNTY.		CAMDEN COUNTY.	
W. Blair Stewart, Atlantic City.	1900	Duncan W. Blake, Gloucester.	1895
Edward A. Reiley, Atlantic City.	1903	Daniel Strock, Camden	1899
W. Edgar Darnall, Atlantic City.	1903	William H. Iszard, Camden.	1899
J. Addison Joy, Atlantic City.	1903	William A. Davis, Camden.	1900
Elisha C. Chew, Atlantic City.	1905	Alexander McAlister, Camden.	1903
Emery Marvel, Atlantic City.	1906	William S. Jones, Camden.	1903
		Harry H. Sherck, Camden.	1903
BERGEN COUNTY.		CUMBERLAND COUNTY.	
Henry C. Neer, Park Ridge.	1892	S. Thomas Day, Port Norris.	1899
David St. John, Hackensack.	1900	Joseph Tomlinson, Bridgeton.	1902
Samuel E. Armstrong, Rutherford.	1901	Ellsmore Stites, Bridgeton.	1907
BURLINGTON COUNTY.		ESSEX COUNTY.	
Enoch Hollingshead, Pemberton	1903	Charles Young, Newark.	1892
Richard H. Parsons, Mt. Holly.	1903	Joseph C. Young, Newark.	1892
Walter E. Hall, Burlington.	1905	Herman C. Bleyle, Newark.	1896

PERMANENT DELEGATES—Continued.

William J. Chandler, South Orange.....	1896
Edward J. Ill, Newark.....	1896
George R. Kent, Newark.....	1896
Charles H. Bailey, Bloomfield.....	1898
Thomas S. P. Fitch, Orange.....	1898
Richard C. Newton, Montclair.....	1898
Joshua W. Read, Newark.....	1898
George A. Van Wagenen, Newark.....	1898
James T. Wrightson, Newark.....	1898
Theron Y. Sutphen, Newark.....	1900
Charles F. Underwood, Newark.....	1900
L. Eugene Hollister, Newark.....	1900
Charles D. Bennett, Newark.....	1900
William B. Graves, East Orange.....	1900
Robert G. Stanwood, Newark.....	1900
Thomas W. Harvey, Orange.....	1901
Aaron K. Baldwin, Newark.....	1902
David E. English, Milburn.....	1903
George B. Philhower, Nutley.....	1903
Richard P. Francis, Montclair.....	1903
Henry L. Coit, Newark.....	1903
Theodore W. Corwin, Newark.....	1903
Richard G. P. Dieffenbach, Newark.....	1903
Edward Staehlin, Newark.....	1903
Livingston S. Hinckley, Newark.....	1903

GLOUCESTER COUNTY.

George E. Reading, Woodbury.....	1893
James Hunter, Jr., Westville.....	1898
Eugene T. Oliphant, Bridgeton.....	1903

HUDSON COUNTY.

James A. Exton, Arlington.....	1898
Joseph M. Rector, Jersey City.....	1900
Fred M. Corwin, Bayonne.....	1900
George E. McLaughlin, Jersey City.....	1900
Mortimer Lampson, Jersey City.....	1900
Talbot R. Chambers, Jersey City.....	1900
Gordon K. Dickinson, Jersey City.....	1906
Frank D. Gray, Jersey City.....	1906
Samuel A. Helfer, Jersey City.....	1907
John C. Parsons, Jersey City.....	1907

HUNTERDON COUNTY.

Isaac S. Cramer, Flemington.....	1892
William S. Creveling, Valley.....	1896
George N. Best, Rosemont.....	1902

MERCER COUNTY.

Richard R. Rogers, Sr., Trenton.....	1895
David Warman, Trenton.....	1897
Elmer Barwis, Trenton.....	1898
Thomas H. Mackenzie, Trenton.....	1900
Charles F. Adams, Trenton.....	1900
John C. Felty, Trenton.....	1900
Henry B. Costill, Trenton.....	1902
George H. Franklin, Hightstown.....	1903

MIDDLESEX COUNTY.

Ambrose Treganowan, South Amboy.....	1898
Frank M. Donohue, New Brunswick.....	1900
David Stephens, New Brunswick.....	1903

MONMOUTH COUNTY.

Henry Mitchell, Asbury Park.....	1892
D. McLean Forman, Freehold.....	1901
Edwin Field, Red Bank.....	1901
Franklin C. Price, Imbstown.....	1901
Samuel Johnson, Asbury Park.....	1901
Cyrus Knecht, Matawan.....	1902

MORRIS COUNTY.

Levi Farrow, Middle Valley.....	1895
Cuthbert Wigg, Boonton.....	1899
James Douglass, Morristown.....	1901
Stephen Pierson, Morristown.....	1901
Frederick W. Flagge, Rockaway.....	1901
Calvin Anderson, Madison.....	1901
Britton D. Evans, Morris Plains.....	1902
Alfred A. Lewis, Morristown.....	1903

OCEAN COUNTY.

Charles L. Lindley, Lakewood.....	1905
-----------------------------------	------

PASSAIC COUNTY.

Philander A. Harris, Paterson.....	1893
George H. Balleray, Paterson.....	1896
John L. Leal, Paterson.....	1899
Charles H. Scribner, Paterson.....	1900
Robert M. Curtis, Paterson.....	1900
John T. Gilson, Paterson.....	1900
Andrew F. McBride, Paterson.....	1902

SALEM COUNTY.

Benjamin A. Waddington, Salem.....	1893
William H. James, Pennsville.....	1900
Henry Chavanne, Salem.....	1900

SOMERSET COUNTY.

Sewell O. B. Taylor, Millstone.....	1897
John P. Hecht, Somerville.....	1898
Aaron L. Stillwell, Somerville.....	1900
Mary E. Gaston, Somerville.....	1902

SUSSEX COUNTY.

Benjamin W. Ferguson, Beemerville.....	1899
----------------------------------------	------

UNION COUNTY.

Alonzo Pettit, Elizabeth.....	1893
Elihu B. Silvers, Rahway.....	1893
J. Ackerman Coles, Scotch Plains.....	1896
Thomas H. Tomlinson, Plainfield.....	1896
James S. Green, Elizabeth.....	1900
Norton L. Wilson, Elizabeth.....	1900
Thomas N. McLean, Elizabeth.....	1903

WARREN COUNTY.

G. Wyckoff Cummins, Belvidere.....	1903
------------------------------------	------

MEMBERS OF COUNTY MEDICAL SOCIETIES

COMPOSING THE

MEDICAL SOCIETY OF NEW JERSEY

JUNE 1907

ATLANTIC COUNTY.

Society organized June 7, 1880. Annual meeting first Friday in January.

President,

Chew, Elisha C., 28 So. Ky. ave., Atlantic City.

Vice-President,

Fish, Clyde M., Pleasantville. (1)

Secretary-Treasurer,

Ridgway, Wm. F., 1200 Pacific ave., Atlantic City.

Reporter,

Shimer, Arthur B., 606 Pacific ave., Atlantic City.

Adams, J. O., 937 N St., N. W., Washington, D. C.

Atherton, A. L., 1005 Pacific ave., Atlantic City.

Barbash, Samuel, 1906 Pacific ave., Atlantic City.

Bartlett, Clara K., 11 No. N. Car. ave., Atlantic C.

Boysen, Theophilus H., Egg Harbor. (1)

Burt, Frederick C., Hammonton. (1)

Conaway, Walt P., 1723 Pac. ave., Atlantic City.

Cuskaden, Albert D., 2 So. Mich. ave., Atlantic C.

Darnall, W. Edgar, 1704 Pacific av., Atlantic City.

Davis, W. Price, 1721 Pacific ave., Atlantic City.

Dunlap, Thomas G., 921 Pacific ave., Atlantic City.

Ewens, Arthur E., 1512 Pacific ave., Atlantic City.

Frank, M. G., Egg Harbor. (1)

Garrabrant, C., 131 N. Vermont av., Atlantic City.

Githens, T. S., 1004 Pacific ave., Atlantic City. (1)

Guion, Edward, 32 So. Virg. ave., Atlantic City.

Harvey, E. H., 20 N. Fla. ave., Atlantic City. (1)

Howard, Emory E., Somers Point. (1)

Ireland, Milton S., 23 So. Cal. ave., Atlantic City.

James, Henry C., Mays Landing. (1)

Jonah, W. E., 1616 Pacific ave., Atlantic City. (1)

Joy, J. Addison, 1920 Pacific ave., Atlantic City.

Leonard, Isaac E., 28 No. Iowa ave., Atlantic City.

Lee, Bernard R., 901 Pacific ave., Atlantic City.

Madden, E. H., Absecon. (1)

Marshall, Joseph C., 1517 Pacific av., Atlantic City.

Marvel, Philip, 1616 Pacific ave., Atlantic City.

Marvel, Emery, 811 Pacific ave., Atlantic City. (1)

McVay, J. C., 707 Pacific ave., Atlantic City.

North, James, 29 So. Tennessee av., Atlantic City.

Pollard, William M., 25 So. Car. av., Atlantic City.

Parker, E. E., Pacific, cor Penn av., Atlantic City.

Porteous, E. J., 811 Pacific ave., Atlantic City. (1)

Reed, Eugene L., 920 Pacific ave., Atlantic City.

Reed, J. W., Absecon. (1)

Reed, Thomas K., 22 No. Penn. av., Atlantic City.

Reiley, Edward A., 20 So. Tenn. av., Atlantic City.

Reynolds, Walter, 27 So. Indiana av., Atlantic City

Saulsberry, Charles E., Mays Landing. (1)

Scott, George, 1109 Pacific ave., Atlantic City. (1)

Senseman, Theo., 101 St. Charles pl., Atlantic City

Sharpe, Edward S., 30 No. Georgia av., Atlantic C

Somers, M. LeRoy, 1910 Pacific av., Atlantic City.

Souder, Lewis R., 19 Victoria ave., Atlantic City.

Stewart, W. Blair, 43 So. N. Car. av., Atlantic City

Taggart, T. D., 25 So. Ill. ave., Atlantic City. (1)

Townsend, Mary E., 13 So. Pa. av., Atlantic City.

Walling, Wm. H., 1209 Pacific ave., Atlantic City.

Webster, J. Bart., 132 S. Maryland av., Atlantic C.

West, Nevin B., Egg Harbor City.

Woolbert, R., 26 N. Del. ave., Atlantic City. (1)

Number members, 55.

BERGEN COUNTY.

Society reorganized February 28, 1854. Annual meeting second Tuesday in April.

President,

Ward, Alfred W., Closter. (2)

Vice-President,

Conrad, Edgar K., Hackensack. (2)

Secretary and Censor,

Currie, Daniel A., Englewood. (2)

Treasurer and Censor,

St. John, David, Hackensack. (2)

Censor,

Armstrong, Samuel E., Rutherford. (2)

Reporter,

Harreys, Charles W., Ridgewood. (2)

Ayres, Melancthon S., Ridgefield. (2)

Bell, J. Finley, Englewood. (2)

Blenckstone, Fred. O., Oradell. (2)

Banks, Hardy M., Englewood. (2)

Bradner, Frederick C., Englewood. (2)

Brewster, Margaret P., Grantwood. (2)

Brundage, Philip Edwin, Grantwood. (2)

Calhoun, Charles, Rutherford. (2)

Conover, E. E., Hasbrouck Heights. (2)

De Mund, Cornelius A., Ridgewood. (2)

De Mund, John F., Ridgewood. (2)

Elsing, Henry C., Ridgefield Park. (2)

Freeland, Frank, Maywood. (2)

Gale, George Bancroft, Rutherford. (2)

Gregory, Thirza L., Englewood. (2)

Hallett, Frederick S., Hackensack. (2)

Haring, John J., Tenaflly. (2)

Holmes, Edwin, Englewood. (2)

Huger, Joseph, Fort Lee. (2)

Lansing, James B. W., Tenaflly. (2)

McFadden, George Howard, Hackensack. (2)

Moenig, Joseph A., Park Ridge. (2)

Neer, Henry C., Park Ridge. (2)

Parsell, Lewis B., Closter. (2)

Payne, Joseph, Midland Park. (2)

Pratt, John E., Dumont. (2)

Proctor, James W., Englewood. (2)

Riordan, John, Carlstadt. (2)

Ruch, Valentine, Jr., Englewood. (2)

Sickenberger, Ernest F., Rutherford. (2)

Sullivan, Michael J., Englewood. (2)

Swayze, Alvah A., Hackensack. (2)

Townsend, Theodore E., Westwood. (2)

Van Dyke, Joseph S., Palisades Park. (2)

Van Horne, Byron G., Englewood. (2)

Van Horne, Carrie H., Englewood. (2)

Vroom, William L., Ridgewood. (2)

White, Frank H., Hackensack.

Wyckoff, J. Talmage, Leonia. (2)

Wyler, Max., Fort Lee. (2)

Zabriskie, Samuel J., Westwood. (2)

Number members, 47.

BURLINGTON COUNTY.

Society organized May 19, 1829. Meets second Wednesday in January, April, June and October.
Annual meeting second Wednesday in January.

President,
Stokes, Joseph, Moorestown. (3)
Vice-President,
Mendelhall, Clinton D., Bordentown. (3)
Secretary,
Tracy, George T., Beverly. (3)
Treasurer,
Hollingshead, Enoch, Pemberton. (3)
Reporter,
Melcher, William P., Mt. Holly. (3)
Censors,
Cassaday, John B., Burlington. (3)
Prickett, Elmer D., Mt. Holly. (3)
Stroud, Frank G., Moorestown. (3)

Adams, Ellsworth S., Beverly. (3)
Baird, David, Jr., Florence. (3)
Barrington, Richard C., Mt. Holly. (3)
Dubell, John E., Columbus. (3)
Dyer, Florence A., Wilcox, Elk County, Pa. (3)
Flynn, John J., Mt. Holly. (3)
Gordon, Altamont L., Burlington. (3)
Haines, Edgar J., Medford. (3)
Haines, J. Clifford, Vincentown. (3)
Haines, J. Ridgway, Mt. Holly. (3)

Hall, Walter E., Burlington. (3)
Hollingshead, I. W., 123 S. 18th St., Phila. (3)
Hollingshead, Lyman, Pemberton. (3)
Janney, Joshua D., Cinnaminson. (3)
Marcy, Alex. Jr., Riverton. (3)
Metzger, Emma P. W., Riverside. (3)
Newcombe, Marcus W., Burlington. (3)
Parry, William C., Hainesport. (3)
Parsons, Richard H., Mt. Holly. (3)
Shipp, William H., Bordentown. (3)
Small, Alexander H., Riverside. (3)
Stoddart, Francis S. J., Rydal, Pa. (3)
Traub, Paul, Bordentown. (3)
Wilkinson, George H., Moorestown. (3)
Wintersteen, J. Boone, Moorestown. (3)

HONORARY MEMBERS.

Noble, Charles P., 1509 Locust St., Phila. (3)
Townsend, E. P., Billings, Mont. (3)
Thomas, Charles H., Philadelphia, Pa. (3)
Price, T. T., Tuckerton, N. J. (3)

CONTRIBUTING MEMBER.

Martin, William, Bristol, Pa.
Number members, 33.

CAMDEN COUNTY.

Organized August 14, 1846. Annual meeting fourth Tuesday in April. Stated meetings, second Tuesday in February, October and December.

President,
Bushey, Sylvan G., 508 Haddon Ave., Camden.
Vice-President,
Mecray, Paul M., 405 Cooper St., Camden. (4)
Secretary,
Strock, Daniel, 818 Federal St., Camden. (4)
Treasurer,
Lippincott, A. Haines, 21 Broadway, Camden. (4)
Historian,
Cramer, Alfred, Jr., 218 N. 5th St., Camden.
Reporter,
Sherk, Henry H., 2647 Westfield Ave., Camden.
Censor and Trustee,
Davis, William A., 511 Cooper St., Camden. (4)
Censors,
Blake, Duncan W., Gloucester City. (4)
Stevenson, John R., Haddonfield. (4)
Westcott, William A., Berlin. (4)
Donges, John W., 525 Broadway, Camden. (4)
Trustees,
Taylor, H. Genet, 305 Cooper St., Camden. (4)
Godfrey, Edmund L. B., 400 Linden, Camden. (4)

Baer, Joseph S., 565 Stevens St., Camden. (4)
Bailey, Wilson G., B'dway and Pine, Camden. (4)
Braddock, Charles S., Jr., Haddonfield. (4)
Benjamin, Dowling, 215 Cooper St., Camden. (4)
Bennett, John K., Gloucester City. (4)
Bentley, David F., 829 Elm St., Camden. (4)
Bicker, Francis J., Fillmore St., Camden. (4)
Bray, Walter S., 902 N. 2d St., Camden. (4)
Caspersen, Robert, 215 N. 3d St., Camden. (4)
Cook, Frank B., Laurel Springs. (4)
Davis, Henry H., 569 Benson St., Camden. (4)
Dunn, Fred. V., 623 S. 3d St., Camden. (4)
Elwell, Alfred M., 407 Cooper St., Camden. (4)
Fithian, Joel W., 608 Broadway, Camden. (4)
Grier, Clarence R., 821 So. 5th, Camden. (4)
Haines, Roland I., 300 Kaighn Ave., Camden. (4)
Haley, John J., Gloucester City. (4)
Henry, George W., 801 Walnut St., Camden. (4)
Hirst, Levi B., 586 Federal St., Camden. (4)

Hoell, Conrad G., 565 Benson St., Camden.
Horning, Frank L., 623 Market St., Camden. (4)
Howard, J. Edgar, Haddonfield. (4)
Hurff, Joseph E., Blackwood. (4)
Iszard, William H., 411 N. 4th St., Camden. (4)
Jarrett, Harry, 925 Broadway, Camden. (4)
Jennings, Chas. H., Centre St., Merchantville. (4)
Jennings, William B., Haddonfield. (4)
Jones, William S., 301 Penn St., Camden. (4)
Kain, William W., 5th and Pine Sts., Camden. (4)
Kelchner, William Irwin, 942 Cooper St., Camden.
Kensinger, William, 733 N. 27th St., Camden. (4)
Kirk, Grant E., 1801 Broadway, Camden. (4)
Leavitt, John F., 520 N. 3d St., Camden. (4)
LeFevre, Adrienette, Blackwood. (4)
Litchfield, Paul N., 1100 Kaighn Ave., Camden.
Lyon, Leslie C., Magnolia. (4)
Madden, T. W., 831 Haddon Ave., Collingswood.
Mahaffey, Jesse L., 537 N. 7th St., Camden. (4)
Marcy, Alexander Sr., Riverton. (4)
Marcy, Frederick W., 6th and Pine Sts., Camden.
Marcy, John W., Merchantville. (4)
Markley, Paul H., 515 Cooper St., Camden. (4)
Martindale, J. Watson, 2501 Federal St., Camden.
McAlister, Alex., 582 Federal St., Camden. (4)
Miller, William E., 1023 S. 8th St., Camden. (4)
Mines, Marcus K., 532 West St., Camden. (4)
Nicholson, Joseph L., 400 Penn St., Camden. (4)
Osmun, Milton M., 611 Broadway, Camden. (4)
Palm, Howard F., 614 N. 2d St., Camden. (4)
Pechin, Edward C., 311 N. 3d St., Camden. (4)
Powell, William R., 702 Market St., Camden. (4)
Pratt, William H., 406 N. 6th St., Camden. (4)
Presley, Sophia, 333 N. 7th St., Camden. (4)
Roughley, William C., Berlin. (4)
Richardson, Emma M., 581 Stevens St., Camden.
Roberts, Joseph E., 401 Broadway, Camden. (4)
Rogers, Edward B., Collingswood. (4)
Rose, Horace L., 842 Federal St., Camden. (4)
Ross, Alexander S., 608 Benson St., Camden. (4)
Saunders, Orris W., 1813 S. 6th St., Camden. (4)
Schellenger, Ed. A. Y., 429 Cooper, Camden. (4)

CAMDEN COUNTY—Continued.

Sharp, Ezra B., 412 Broadway, Camden. (4)
 Sharp, Jennie S., 504 Broadway. (4)
 Smith, J. Anson, Blackwood. (4)
 Sprenger, William A., 518 Broadway, Camden. (4)
 Stout, Daniel, Berlin. (4)
 Van Sciver, John E. L., 445 S. 4th St., Camden.
 Wills, Joseph H., 229 N. 3d St., Camden. (4)
 Wingender, Wendell P., 800 Market St., Camden.
 Wood, Orran A., Magnolia. (4)
 Woolston, Elijah B., Marlton. (4)

White, J. T., 1198 Haddon Ave., Camden. (4)

HONORARY MEMBERS.

Boughman, G. W., Marshalltown, Del. (4)
 Davis, John B., 6th and Lawrence Sts., Camden.
 Dean, Richard C., U. S. Navy. (4)
 Garrison, Charles C., Merchantville. (4)
 Hewlings, J. W., Moorestown. (4)
 White, J. Orlando, 329 Cooper St., Camden. (4)
 Number Members, 85.

CAPE MAY COUNTY.

Society organized March 12, 1885. Meets first Tuesday in April and October.

President,

Cohen, Nathan A., Wildwood. (5)

Vice-President,

Geyer, George W., Cape May C. H. (5)

Reporter and Secretary,

Lummis, Marshall F., Holly Beach. (5)

Treasurer,

Marshall, Randolph, Tuckahoe. (5)

Censors,

Hand, Anna M., Cape May City. (5)

Marcy, Virgil M. D., Cape May. (5)

Webster, D. King, Cape May Court House. (4)

Garrison, Joseph E., Ocean City. (5)

Jaffe, Joseph, Woodbine. (5)

Lake, William A., Erma. (5)

Leach, Alonzo L., Cape May City. (5)

Mace, Margaret, Anglesea. (5)

Marshall, Joseph C., Tuckahoe. (5)

Mecray, James, Cape May City. (5)

Physick, Emlen, Cape May City. (5)

Slaughter, J. M., Wildwood. (5)

Tomlin, H. H., Wildwood. (5)

Way, Eugene, Dennisville. (5)

Way, Julius, Cape May Court House. (5)

HONORARY MEMBERS.

Gandy, Charles M., U. S. Army. (5)

Ingram, J. H., China. (5)

Number Members, 23.

CUMBERLAND COUNTY.

Society organized Dec. 8th, 1818. Annual meeting second Tuesday in April.

President,

Corson, Elton S., Bridgeton. (6)

Vice-President,

Loper, John C., Bridgeton. (6)

Secretary,

Mander, A. J., Millville. (6)

Treasurer,

Tomlinson, Joseph, Bridgeton. (6)

Reporter,

Wilson, Stacy M., Bridgeton. (6)

Bateman, Frank M., Cedarville. (6)

Bossert, Leon H., Newport. (6)

Bradford, Edward B., Port Norris. (6)

Chapman, Ellis J., Shiloh. (6)

Charlesworth, Irving E., Bridgeton. (6)

Charlesworth, Ralph R., Millville. (6)

Cornwell, Alfred, Bridgeton. (6)

Day, Grafton E., Camden. (6)

Day, Grafton E., 427 Haddon Ave., Camden. (6)

Diamant, Edward L., Bridgeton. (6)

Dunlap, Mary J., Vineland. (6)

Ewing, E. Eldridge, Cape May. (6)

Elmer, Matthew K., Bridgeton. (6)

Fogg, Edward S., Bridgeton. (6)

Glendon, Walter P., Cedarville. (6)

Greenwood, Nathaniel S., Rosenhayn. (6)

Hand, Leslie L., Lakehurst. (6)

Howard, Joseph T. D., Washington, D. C. (6)

Jones, Ferdinand, Millville. (6)

Kumpf, Reba Lloyd, Bridgeton. (6)

Lore, Harry E., Fairton. (6)

Mayhew, Charles H., Millville. (6)

Mayhew, Samuel D., Bridgeton. (6)

Miller, H. Garrett, Millville. (6)

Moore, John H., Bridgeton. (6)

Oliver, David H., Bridgeton. (6)

Robinson, Silas E., Waldwick. (6)

Sewall, Millard F., Bridgeton. (6)

Sheppard, Frank R., Millville. (6)

Smith, Thomas J., Bridgeton. (6)

Snyder, Sharps M., Greenwich. (6)

Stites, Ellsmore, Bridgeton. (6)

Thompson, John R. C., Bridgeton. (6)

Wade, John W., Millville. (6)

Wilson, Charles W., Vineland. (6)

ASSOCIATE MEMBERS.

Ashton, W. E., 2011 Walnut St., Phila., Pa. (6)

Barton, J. M., 1314 Spruce St., Phila., Pa. (6)

DaCosta, J. Chalmers, 2045 Walnut St., Phila., Pa.

Daland, Judson, 317 S. 18th St., Phila., Pa. (6)

Hare, H. A., 1801 Spruce St., Phila., Pa.

Hirst, B. C., 1821 Spruce St., Phila., Pa. (6)

Keen, W. W., 1729 Chestnut St., Phila., Pa. (6)

Noble, Charles P., 1509 Locust St., Phila., Pa. (6)

Oliver, Chas. A., 1507 Locust St., Phila., Pa. (6)

Reisman, David, 162 Spruce St., Phila., Pa. (6)

HONORARY MEMBER.

Applegate, J. C., 3540 N. Broad St., Phila., Pa. (6)

Number Members, 40.

ESSEX COUNTY.

Society organized June 18, 1816. Annual meeting first Tuesday in April.

President,

Bleyle, Herman C., 15 Walnut, Newark. (7)

Vice-President,

Eagleton, Wells P., 15 Lombardy, Newark. (7)

Secretary,

Hunt, Ralph H., 29 Harrison St., E. Orange. (7)

Treasurer,

Bennett, Chas. D., 167 Clinton Ave., Newark. (7)

Reporter,

Pinneo, Frank W., 199 Garside St., Newark. (7)

Adams, John K., 475 Main St., Orange. (7)

ESSEX COUNTY—Continued.

- Albano, Giuseppe, 498 Chester Ave., Newark. (7)
 Alexander, Walter G., 67 Oakwood Ave., Orange.
 Allis, Jeremiah A., 386 Park St., Upper Montclair.
 Areson, Wm. H., 153 Blvu. ave., Upper Montclair.
 Asher, Maurice, 20 Court, Newark. (7)
 Bacevycze, Anthony M., 119 Madison Ave., Newk.
 Bailey, Charles H., 189 Liberty, Bloomfield. (7)
 Bailey, Wm. O., 282 S. Orange Ave., Newark. (7)
 Baker, Charles F., 47 Walnut, Newark. (7)
 Baldwin, Aaron K., 291 Plane, Newark. (7)
 Baldwin, Sam'l H., 479 Clinton Ave., Newark. (7)
 Baldwin, Winfred E., 462 Orange, Newark. (7)
 Becker, Frederick W., 478 Clinton St., Newark.
 Becket, George C., 135 N. Walnut, East Orange.
 Benedict, Alfred C., 69 Ward Pl., S. Orange. (7)
 Bianchi, Angelo R., 104 7th Ave., Newark. (7)
 Bingham, Arthur W., 299 Main, East Orange. (7)
 Bleick, Theo. E., 340 Waverly Ave., Newark. (7)
 Bleick, Wm. D., 517 Clinton Ave., Newark. (7)
 Bloom, David M., 235 S. 6th St., Newark. (7)
 Boyle, Thomas P., 110 Belleville Ave., Newark. (7)
 Bradshaw, John H., 27 High St., Orange. (7)
 Bradford, Stella S., Montclair. (7)
 Braun, Rudolph, 180 Polk, Newark. (7)
 Bridges, Isabel M., 497 Mt. Pleasant Ave., Newk.
 Brien, William M., 585 Valley Rd., W. Orange.
 Brown, James S., 43 S. Fullerton ave., Montclair.
 Bruckner, Charles H., 118 Newton, Newark. (7)
 Buerman, William, 352 Belmont Ave., Newark.
 Burke, Charles V., 537 E. Ferry St., Newark. (7)
 Burnett, Hayes J., 25 Orange Road, Montclair.
 Burns, Edwin L., 269 Broad, Newark. (7)
 Burrage, Robert L., 383 Mt. Prospect Ave., Newk.
 Buttner, Carl, Day St. cor. White St., Orange. (7)
 Buvinger, Charles W., 5 S. Arlington Ave., E. O.
 Campbell, Wellington, Short Hills rd, Short Hills.
 Campbell, Dundas Ralph, 442 Warren, Newark.
 Carman, Fletcher F., 129 Walnut, Montclair. (7)
 Case, Levi W., 41 Park, Montclair. (7)
 Cater, Douglas A., 107 Park, E. Orange. (7)
 Chandler, Henry M., 408 Main, Orange. (7)
 Chandler, Wm. J., 65 S. Orange ave., So. Orange.
 Christian, Albion C., Irvington. (7)
 Clark, J. Henry, 12 Walnut, Newark. (7)
 Coe, Richard, 11 Warren, Newark. (7)
 Cohn, Herman, 281 Mulberry St., Newark. (7)
 Coit, Henry L., 277 Mt. Prospect Ave., Newark.
 Colie, Edward Martin, 109 Prospect, E. Orange.
 Condon, John F., 168 Washington, Belleville. (7)
 Cook, Hugh F., 15 Roseville Ave., Newark. (7)
 Cook, Mary, 16 James St., Newark. (7)
 Corrigan, George F., 344 Lafayette St., Newark.
 Corwin, Theodore W., 5 W. Park, Newark. (7)
 Cory, Horace C., 224 Broad, Newark. (7)
 Crane, Josiah Wellington, 17 Bank, Newark. (7)
 Crawford, David H., 331 Belleville, Newark. (7)
 Cross, Anna M., 20 Marshall, Newark. (7)
 Danzis, Max, 46 Mercer St., Newark. (7)
 Davenport, Peter B., Vailsburgh. (7)
 Davis, Wm. H. K., 42 N. Arlington av., E. Orange
 Dennis, John, 287 Belleville Ave., Newark. (7)
 DeVausney, Winfield S., 102 Central Ave., Newk.
 Devlin, Frank, 98 Congress, Newark. (7)
 Devlin, Hugh Joseph, 167 Orchard, Newark. (7)
 Dias, Joseph L., 91 S. 19th St., Newark. (7)
 Dieffenbach, Richard G. P., 222 S. Orange Av., N.
 Dill, Daniel M., 425 S. Orange Ave., Newark. (7)
 Disbrow, Wm. S., 151 Orchard St., Newark. (7)
 Dodge, Walter, 32 Cleveland St., Orange. (7)
 Dougherty, Arthur C., 158 Washington, Newark.
 Duryee, John L., 436 High, Newark. (7)
 Edwards, Sarah M., 207 Summer Ave., Newark.
 Emerson, Linn, 234 Main St., Orange. (7)
 Epstein, Henry B., 465 High, Newark. (7)
 English, David E., Millburn. (7)
 English, James R., 830 Clinton Ave., Newark. (7)
 Fewsmith, Joseph, 47 Central Ave., Newark.
 Fewsmith, Joseph L., 76 Central Ave., Newark.
 Fischer, Arnim, 42 16th Ave., Newark. (7)
 Fitch, Thomas S. P., 14 Prospect St., E. Orange.
 Foster, W. Story, 111 Bloomfield Ave., Newark.
 Francis, Richard P., 12 Plymouth, Montclair. (7)
 Freeman, Richard D., 52 Vose ave., South Orange.
 Gage, Ruel S., 17 Gould Ave., Newark. (7)
 Garside, Charles Z., 130 Garside St., Newark.
 Gauch, William, 199 High, Newark. (7)
 Gluckman, Isaac E., 70 Wickliffe, Newark. (7)
 Goodwin, William M., 70 Congress, Newark. (7)
 Graves, William B., 426 Main, E. Orange. (7)
 Gray, Thomas N., 20 Halsted, East Orange. (7)
 Greenbaum, Solomon, 142 W. Kinney, Newark.
 Greenfield, B. H., 205 S. Orange Ave., Newark.
 Griffiths, Chauncey B., 145 Monmouth, Newark.
 Guenther, Emil E., 159 W. Kinney, Newark. (7)
 Hagar, John F., 88 Ferry, Newark. (7)
 Hagen, Charles W., 224 S. Orange Ave., Newark.
 Hagerty, John F., 30 Wallace Pl., Newark. (7)
 Hagney, Frederick W., 69 Penn. ave., Newark.
 Haines, Eleanor, 934 Broad, Newark. (7)
 Halsey, Levi W., 49 Church, Montclair. (7)
 Hamill, Edward H., Prudential Bldg., Newark.
 Harbert, G. Eugene, 540 Main, East Orange. (7)
 Hart, Hugh M., 16 Gouverneur, Newark. (7)
 Harvey, Thos. W., Main and Hillyer sts., Orange.
 Haussling, Francis R., 661 High, Newark. (7)
 Hawkes, E. Zeh., 15 Central Ave., Newark. (7)
 Haydon, Joseph H., 22 Brientnall Pl., Newark.
 Hemsath, John, 36 Spruce, Newark. (7)
 Herold, Herman C. H., 77 Congress, Newark. (7)
 Hicks, William H., 425 So. Orange Ave., Newark.
 Hinckley, Livingston S., 182 Clinton Ave., Newk.
 Holden, Edgar, Jr., 617 Mt. Prospect av., Newark.
 Holler, Henry B., 234 Montclair ave., Newark.
 Hollister, L. Eugene, 138 Clinton Ave., Newark.
 Holmes, George J., 17 Pennington, Newark. (7)
 Houck, William J., 110 Bloomfield Ave., Newark.
 Husserl, Siegfried, 273 S. 6th St., Newark. (7)
 Ill, Charles L., 188 Clinton Ave., Newark. (7)
 Ill, Edward J., 1002 Broad, Newark. (7)
 Jacobson, Frederick C., 969 Broad, Newark. (7)
 Jedel, Meyer, 362 Warren, Newark. (7)
 Johnson, Jotham C., 11 Tichenor, Newark. (7)
 Kaufman, Ernest, 55 New, Newark. (7)
 Keim, William F., 7 Roseville Ave., Newark.
 Kent, George R., 37 8th Ave., Newark. (7)
 Kerns, Francis J., 384 Central ave., Newark. (7)
 Kipp, Charles J., 560 Broad St., Newark. (7)
 Kirkman, Leroy G., 256 Orange St., Newark. (7)
 Kitchen, Joseph M. W., 94 Prospect, East Orange.
 Klein, Maurice I., 127 Wickliffe, Newark. (7)
 Knowles, Francis E., 162 S. Orange av., S. Orange
 Koch, Louis A., 20 Orchard, Newark. (7)
 Korneman, Henry A., 262 15th Ave., Newark. (7)
 Lamont, George F. M., 194 Clinton Ave., Newark.
 Lane, Frank B., 528 Main St., East Orange. (7)
 Lee, Stephen G., 25 Halsted, East Orange. (7)
 Lehlbach, Charles F., 537 High, Newark. (7)
 Levy, Julius, 298 Bank, Newark. (7)
 Lewis, George Rae, 481 Summer Ave., Newark.
 Leyenberger, Samuel B. W., 98 3d Ave., Newark.
 Lippincott, Jesse D., 304 Summer Ave., Newark.
 Lockwood, Frank W., 237 Prospect, East Orange.
 Loeb, Alfred A., 347 Littleton Ave., Newark. (7)
 Long, Herbert W., 102 Jefferson, Newark. (7)

ESSEX COUNTY—Continued.

- Loweree, Thomas W., 30 Hill, Newark. (7)
 Lowrey, James H., 79 Congress, Newark. (7)
 Luther, Calista V., 151 Scotland rd., So. Orange.
 Maas, Max A., 489 High St., Newark. (7)
 Maghee, James M., 7 Main St., W. Orange. (7)
 Mancusi-Ungaro, L., 86 Mt. Prospect Ave., Newk.
 Martinetti, Carlo, 139 Centre, Orange. (7)
 Martland, William H., 1138 Broad, Newark. (7)
 Matthews, Henry E., 12 Hillside, Orange. (7)
 McCabe, Thomas S., 234 Lafayette St., Newark.
 McCormick, Daniel L., 253 Mulberry, Newark. (7)
 McCormick, Henry D., Verona. (7)
 McKenzie, William H., 942 Broad, Newark. (7)
 Mead, Sarah R., 16 James, Newark. (7)
 Megaro, Panerazio, M., 313 High, Newark. (7)
 Menk, Paul E., 106 Market St., Newark. (7)
 Mercer, Archibald, 31 Washington, Newark. (7)
 Mercelis, Elizabeth, 17 Plymouth, Montclair. (7)
 Merrill, Charles F., 207 Central ave., Newark. (7)
 Merrins, Edward M., 29 William St., E. Orange.
 Meyer, Franklin L., 18 Warren St., Newark. (7)
 Mitchell, Augustus J., 74 South, Newark. (7)
 Mitchell, Winthrop D., 23 S. Grove, East Orange.
 Moore, John D., 424 Franklyn, Bloomfield. (7)
 Morris, Clement, 75 Washington Ave., Newark.
 Morrison, John B., 97 Halsey St., Newark. (7)
 Murray, Eugene W., 91 Washington Ave., Newark
 Muta, Samuel A., Park Ave., West Orange. (7)
 Nadler, Frederick C., 31 Green, Newark. (7)
 Nash, Albert B., 10 So. 13th, Newark. (7)
 Neare, Clifford R., 2 Hawthorne, E. Orange. (7)
 Newman, Emanuel D., 81 New, Newark. (7)
 Newton, Anne B., 137 S. Orange ave., So. Orange.
 Newton, Richard C., 42 Church, Montclair. (7)
 Noble, Willis C., 55 S. Fullerton, Montclair. (7)
 Nolte, Henry W., 255 Mulberry, Newark. (7)
 Opdike, Ralph, 27 S. Fullerton, Montclair. (7)
 Palmer, Gideon Howard, 11 Wakeman Ave., N.k.
 Parsonette, Victor, 132 W. Kinney St., Newark.
 Paul, Frederick M., 562 High St., Newark. (7)
 Peck, Edward E., Bloomfield ave., Caldwell. (7)
 Pelouze, Percy S., 671 Springfield Ave., Newark.
 Petry, William, 325 S. Orange Ave., Newark. (7)
 Phelan, Edward S., 18 South St., Newark. (7)
 Philhower, George P., Grant ave., Nutley. (7)
 Poor, Daniel W., 27 Ridge St., Orange. (7)
 Porter, Katherine, 149 William, Orange. (7)
 Potter, Palmer A., East Orange. (7)
 Potter, Robert C., 34 Centre St., Newark. (7)
 Price, Nathaniel G., 62 Boston, Newark. (7)
 Quinby, William O'G., 80 Columbia, Newark. (2)
 Randall, Charles H., 50 3d Ave., Newark. (7)
 Ranson, Briscoe B., Jr., Maplewood. (7)
 Read, Joshua W., 82 Park Pl., Newark. (7)
 Ribbans, R. C., 15 Warren St., Newark. (7)
 Richman, Edward M., 252 Mulberry, Newark. (7)
 Ricord, Philip, 268 Bank, Newark. (7)
 Robertson, Samuel E., 21 Walnut, Newark. (7)
 Robinson, Benjamin D., 265 Mulberry, Newark.
 Robinson, Manning N., 159 Elm, Newark. (7)
 Robinson, William D., 12 S. Grove, East Orange.
 Roden, Hugh P., 345 Washington, Newark. (7)
 Roeber, William J., 104 Spruce, Newark. (7)
 Rogers, George A., 1 Wallace, Newark. (7)
 Rogers, Robert H., 64 S. 10th, Newark. (7)
 Rose, William Walter, 2 Myrtle Ave., Newark.
 Rosensohn, William, 310 Dodd, East Orange. (7)
 Rostow, Clarence, 655 High, Newark. (7)
 Runyon, Mefford, 110 Irvington ave., So. Orange.
 Russell, Anthony B., 54 William, East Orange.
 Scheppach, Harry A., 164 Bergen St., Newark. (7)
 Schneider, Charles A., 44 Hillside Pl., Newark.
 Schopfer, William A., 43 Read, Newark. (7)
 Schureman, Charles A., 22 Hill, Newark. (7)
 Schwarz, Emanuel, 561 High, Newark. (7)
 Sealy, Edward, 369 Washington, Newark.
 Seibert, Edgar C., 436 Main, Orange. (7)
 Seidler, William F., 21 Ferry, Newark. (7)
 Seidman, Marcus, 580 High, Newark. (7)
 Shailer, Sumner, 271 Clinton Ave., Newark. (7)
 Shaul, Frederick G., 70 Washington, Bloomfield.
 Sherman, Elbert S., 191 Summer Ave., Newark.
 Shick, William F., 31 Park, Newark. (7)
 Simmons, M. Herbert, 225 Cleveland, Orange. (7)
 Smith, Anna L., 50 N. Fullerton Ave., Montclair.
 Smith, Leonard H., 6 N. Munn Ave., E. Orange.
 Smith, D. Winans, 201 Walnut, Newark. (7)
 Sprague, Edward W., 108 Washington St., Newk.
 Staehlin, Edward, 493 High, Newark. (7)
 Stage, Jacob S., 95 Jefferson, Newark. (7)
 Stahl, Alfred, 550 Bergen St., Newark. (7)
 Stanwood, Robert G., 117 N. 6th St., Newark. (7)
 Steiner, Edwin, 1 Sterling, Newark. (7)
 Sutphen, Carl E., 181 Roseville Ave., Newark. (7)
 Sutphen, Edward B., 997 Broad, Newark. (7)
 Sutphen, Theron Y., 997 Broad, Newark. (7)
 Synnott, Martin J., 34 S. Fullerton Ave., Montclair
 Tarbell, Henry A., 28½ Thomas, Newark. (7)
 Teeter, Charles E., 418 Orange, Newark. (7)
 Teimer, Theodor, 450 High, Newark. (7)
 Titus, Charles W., 487 Orange, Newark. (7)
 Towle, Henry A., 16 Halsey, Newark. (7)
 Trainor, James H., 131 Elm, Newark. (7)
 Tutschulte, Ernest, 149 Polk, Newark. (7)
 Twinch, Sidney A., 598 Broad, Newark. (7)
 Underwood, Charles F., 259 Mt. Prospect Ave., N.
 Vail, Herbert B., 282 Washington ave., Belleville.
 Van Dwyne, Sarah E., 247 Belleville Ave., Newark.
 Van Dyke, Benj. S., 101 Eaton Pl., East Orange.
 Van Wagenen, George A., 101 N. 6th, Newark.
 Vinton, Maria M., 15 Halsted pl., East Orange.
 Voelbel, Benj. H., So. Orange ave., Vailsburgh.
 Waite, George N., 569 High, Newark. (7)
 Wallace, Henry, 201 Ridgewood ave., Glen Ridge.
 Wallhauser, Henry J. F., 47 New, Newark. (7)
 Ward, Gertrude P., 41 Park pl., Bloomfield. (7)
 Ward, Edwin M., 17 Park pl., Bloomfield. (7)
 Ward, William J., 438 Warren, Newark. (7)
 Warner, W. H. Alonzo, 400 Central Ave., E. Or.
 Warren, George L., 77 Houston, Newark. (7)
 Warren, Wm. H., 863 Mt. Prospect ave., Newark.
 Washington, Walter S., 8 Washington Pl., Newk.
 Webner, Frederick C., 96 Clinton Ave., Newark.
 Weiss, Louis, 227 S. Orange Ave., Newark. (7)
 Welshman, Geo. O., 150 Summer av., Newark. (7)
 Wherry, Elmer G., 325 Clinton Ave., Newark. (7)
 White, Wm. H., 451 Franklyn, Bloomfield. (7)
 Whitehorne, Henry B., Grove ave., Verona. (7)
 Wickman, Albert, 325 Washington, Newark. (7)
 Wilson, W. Stockton, 96 Montclair Ave., Newark.
 Winans, Joseph C., St. Michael's Hospital, Newk.
 Worl, Edward E., 271 High, Newark. (7)
 Wort, Fred. J., Jr., 102 Clinton ave., Newark. (7)
 Wormley, James A., 83 New, Newark. (7)
 Wrightson, James T., 25 Walnut, Newark. (7)
 Young, Charles, 23 E. Kinney, Newark. (7)
 Young, Joseph C., 964 Broad, Newark. (7)
 Number members, 287.

GLOUCESTER COUNTY.

Society organized December, 1818. Annual meeting third Thursday in January.

President,

Luffbary, M. Jones, Glassboro. (8)

Vice-President,

Simmons, Wesley Grant, Swedesboro. (8)

Secretary and Treasurer,

Reading, George E., Woodbury. (8)

Reporter,

Wilson, Howard A., Woodbury. (8)

Censors,

Halsey, Luther M., Williamstown. (8)

Hunter, James, Jr., Westville. (7)

Stout, Harry A., Wenonah. (8)

Ashcraft, Samuel F., Mullica Hill. (7)

Brewer, William, Woodbury. (8)

Diverty, Henry B., Woodbury. (8)

Duffield, Elias M., Glassboro. (8)

Edwards, J. Gaunt, Williamstown. (8)

Fisler, C. Frank, Clayton. (8)

Gifford, T. Franklin, Woodbury. (8)

Heritage, Charles S., Glassboro. (8)

Hillegas, Eugene Z., Mantua. (8)

Laws, George C., Paulsboro. (8)

Ogden, B. Frank, Clayton. (8)

Oliphant, Eugene T., Bridgeport. (8)

Pedrick, Charles D., Glassboro. (8)

Phillips, Cyrus B., Pitman Grove. (8)

Sparks, U. S. Grant, Mantua. (8)

Stanger, Samuel F., Harrisonville. (8)

Stilwagon, Philip E., Bridgeport. (8)

Stratton, William M., Woodbury. (8)

HONORARY MEMBERS.

Bailey, George W., Philadelphia, Pa. (8)

Daland, Judson, Philadelphia, Pa. (8)

DeGrofft, E. E., Woodstown. (8)

Hare, Hobart A., Philadelphia, Pa. (8)

Iszard, William H., Camden. (8)

Noble, Charles P., Philadelphia, Pa. (8)

Turnbull, Chas. S., 1935 Chestnut, Phila., Pa. (8)

Number Members, 25.

HUDSON COUNTY

Organized October 11, 1851. Annual meeting first Tuesday in April.

President,

Gray, Frank D., 673 Bergen Ave., Jersey City. (9)

Vice-President,

Mooney, John J., 554 Jersey Ave., Jersey City. (9)

Secretary,

Hasking, Arthur P., 318 M'tgomery St., Jersey C.

Treasurer,

Brinkerhoff, Henry H., 695 Bergen Ave., Jersey C.

Reporter,

Strasser, August A., 115 Beach St., Arlington.

Censors,

Parsons, John C., 311 York St., Jersey City.

Watson, W. Perry, 116 Gifford Ave., Jersey City.

Culver, George M., 49 Tonnelle Ave., Jersey City.

Abbott, Henry D., 24 East 33d St., Bayonne. (9)

Allen, Ulamor, 401 Ogden Ave., Jersey City. (9)

Ames, Elmer H., 17 Madison Ave., Jersey City. (9)

Allers, Henry, 109 Harrison Ave., Harrison. (9)

Arlitz, William J., 803 Hudson St., Hoboken. (9)

Armstrong, Edw. C., 512 Fulton, Town of Union.

Baker, E. Mills, 103 Wayne St., Jersey City. (9)

Baumann, John J., 126 Mercer St., Jersey City.

Baumann, Louis, 250 5th, Jersey City. (9)

Blanchard, Oliver R., 37 Clinton Ave., Jersey City.

Bogardus, Henry J., 427 Bergen Ave., Jersey City.

Borgmeyer, J. G. Lewis, 67 W. 8th, Bayonne. (9)

Bowyer, Frank F., 262 Barrow St., Jersey City. (9)

Brooke, William W., 915 Ave. C, Bayonne. (9)

Broderick, John J., 355 Pacific Ave., Jersey City.

Bull, Edward L., 2 Madison Ave., Jersey City. (9)

Burnette, Henry H., 724 Wash'gton St., Hoboken.

Chambers, Talbot R., 15 Exchange Pl., Jersey City

Chard, John A., 14 Virginia Ave., Jersey City. (9)

Child, Frank M., 927 Washington St., Hoboken.

Converse, Charles B., 218 Palisade Ave., Jersey C.

Corwin, Fred M., 696 Ave. C, Bayonne. (9)

Craig, Burdette P., 61 Highland Ave., Jersey City.

Cropper, Charles W., 85 Gifford Ave., Jersey City.

Culver, D. LeRoy, 287 York St., Jersey City. (9)

Culver, S. Herbert, 98 Magnolia Ave., Jersey City.

Dallas, Alexander, 24 E. 22d St., Bayonne. (9)

DeHart, Clara M., 99 Mercer, Jersey City. (9)

DeMerritt, Chas. L., 394 Clinton Ave., W. Hobo'n.

Dickinson, Gordon K., 280 M'tgomery St., Jer. C.

Dinglestedt, Richard H., 300 Hudson, Hoboken.

Dodson, Louis W., 660 Jersey Ave., Jersey City.

Dolphin, Michael O. F., 112 N. 4th, Harrison. (9)

Donahue, Lucius F., 33 Dodge St., Bayonne. (9)

Duckett, Warren J., 932 Summit Ave., Jersey C.

Dunkel, Edwin K., 278 M'tgomery St., Jersey City.

Enright, James G., 451½ Jersey Ave., Jersey City.

Everitt, Chauncey V., 38 Boyd Ave., Jersey City.

Everitt, John R., 38 Boyd Ave., Jersey City. (9)

Exton, James A., 75 Beach St., Arlington. (9)

Faber, John, 289 Central Ave., Jersey City. (9)

Faison, William F., 490 Jersey Ave., Jersey City.

Farr, John C., Jr., 1228 Bloomfield St., Hoboken.

Finke, Charles H., 317 York, Jersey City.

Finn, Frederick A., 157 Danforth Av. Jersey City.

Finn, Joseph F., 157 Danforth ave., Jer. City. (9)

Foley, Michael F., 710 Hudson St., Hoboken. (9)

Fopeano, Joseph L., 265 4th St., Hoboken. (9)

Forman, Archibald C., 41 W. 32d St., Bayonne.

Forman, Howard S., 103 Jewett ave., J. City. (9)

Frace, Peter W., 106 11th St., Hoboken. (9)

Franklin, Lewis, 193 Palisade ave., Jersey City.

Friele, William, 203 Palisade ave., Jersey City. (9)

Fyfe, George D., 540 Bramhall ave., J. City. (9)

Gamson, Emil, 39 W. 22nd St., Bayonne. (9)

Gelbach, Rudolph W., 809 Hudson St., Hoboken.

Gilchrist, Charles A., 916 Hudson St., Hoboken.

Gillé, Hugo, 149 Congress St., Jersey City.

Gilman, Robert B., 85 Congress St., Jersey City.

Goldberg, Eugene H., 238 Kearny av., Kearny (9)

Hardenburg, Dan'l S., Jr., 354 Pacific av., J. City.

Hart, Edward P., 264 Montgomery St., Jersey C.

Hamill, Patrick J., 300 Varick St., Jersey City.

Heintzelmann, Bert. S., 43 W. 33d St., Bayonne.

Helfer, Samuel A., 626 Hudson, Hoboken. (9)

Hetherington, Wm. L., 299 Varick St., Jersey City.

Hill, Christopher D., 200 York St., Jersey City.

Hoening, Charles E., 928 Hudson St., Hoboken.

Hoffman, Peter, 209 Pavonia ave., Jersey City. (9)

Jacquemin, T. J., 506 Clinton av., West Hoboken.

Jacques, J. Eugenia, 74 Waverly St., Jersey City.

Jaquith, Walter A., Broad and Market, New. (9)

Jones, J. Morgan, 2800 Boulevard, J. City. (9)

Keegan, Thomas J., 838 Grand St., Jersey City.

King, Geo. E., Hud. Co. Asylum, Secaucus. (9)

Kirsten, A. John, 287 Varick St., Jersey City. (9)

Kyte, Calvin F., 77 Garrison, Jersey City. (9)

Koppel, Joseph, 244 Grove St., Jersey City. (9)

Kudlich, William L., 408 Hudson St., Hoboken.

HUDSON COUNTY—Continued.

Kuehne, Richard, 1118 Summit ave., Jer. City. (9)
 Lambert, Frederick E., 157 Ocean ave., J. City (9)
 Lampson, Mortimer, 322 Pacific ave., J. City. (9)
 Limeburner, Chas. A., 79 Danforth ave., J. C. (9)
 Lautmann, John, 297 4th St., Jersey City. (9)
 Magner, John J., 666 Jersey ave., Jersey City. (9)
 Mallalieu, Frank W., 16 Monticello av., Jersey C.
 Marks, Edward G., 655 Kearny ave., Arlington.
 Matthews, William J., 1009 Garden St., Hoboken.
 McGill, John D., 16 Gifford ave., Jersey City. (9)
 McGlennon, Wm. B., 310 Central av., E. New. (9)
 McLaughlin, George E., 41 Crescent av., J. C. (9)
 McLean, John J., 430 Hoboken ave., J. City. (9)
 McLoughlin, Thomas J., 558 Jersey ave., J. C. (9)
 McNamara, Thos. C., 613 Hudson St., Hoboken.
 McNeeney, Claude E., 116 Mercer St., Jersey C.
 Meyer, William, 446 Clinton ave., W. Hob. (9)
 Mulvaney, Edward, 485 Jersey ave., Jersey City.
 Muttart, George W., 702 Ocean ave., Jer. City. (9)
 Nelson, A., 105 Grand St., Jersey City. (9)
 Nuse, Edward F., 550½ Jersey ave., Jer. City. (9)
 Oakley, H. W., 800 Montgomery St., Jersey City.
 O'Connor, Jeremiah F., 85 Kearny ave., Kearny.
 Oestman, August W., 961 Summit av., J. City. (9)
 Paganelli, T. Richard, 401 Monroe St., Hoboken.
 Parker, William J., 694 Bergen ave., J. City. (9)
 Pezzè, Luigi, 280 4th St., Jersey City. (9)
 Pinder, David S., 203 Garden St., Hoboken. (9)
 Piskorski, Abdon V., 261 5th St., Jersey City. (9)
 Pollak, Berthold S., 241 Grove St., Jersey City.
 Poole, Louis, 521 Palisade ave., W. Hoboken. (9)
 Purdy, Chas. H., 312 Montgomery St., Jersey City.

Pyle, Wallace, 612 Bergen St., Jersey City. (9)
 Rector, Joseph M., 307 York St., Jersey City. (9)
 Reich, Siegmund A., 959 Summit ave., Jersey City.
 Rosenkrans, James H., 826 Hudson St., Hoboken.
 Rue, Henry B., 931 Bloomfield St., Hoboken. (9)
 Sauer, Ferdinand W., 314 Varick, Jersey City. (9)
 Schlemm, Richard, 111 Palisade ave., T. of U. (9)
 Sexsmith, Geo. H., 719 Ave. C, Bayonne. (9)
 Sheiner, L. H., 441 W. 13th St., West New York.
 Shera, George W., 489 Jersey ave., Jer. City. (9)
 Spence, Henry, 681 Bergen ave., Jersey City. (9)
 Squier, Manning F., 234 Harrison av., Har. (9)
 Steadman, Eban T., 635 Wash'gton St., Hoboken.
 Steadman, Walter, 706 Bloomfield St., Hoboken.
 Stellwagen, Fred B., 28 Clifton ter., Weehawken.
 Stevens, Pliney F., 853 Ave. C, Bayonne. (9)
 Sulouff, S. Henry, 10 W. Hamilton Pl., J. City (9)
 Swiney, Merrill A., 341 Avenue C, Bayonne. (9)
 Von Deestin, H. T., 619 Garden St., Hoboken. (9)
 Vreeland, Clarence L., 174 Ocean ave., J. C. (9)
 Vreeland, Hamilton, 78 Summit ave., Jersey City.
 Vreeland, William N., 2 Park, Jersey City. (9)
 Walschied, A. John, 309 Fulton, T. of Union. (9)
 Wainright, J. M. B., 315 Varick St., Jersey City.
 Ware, James W., 977 Avenue C, Bayonne. (9)
 White, George D., 459 Fairmount ave., J. City. (9)
 Weil, Edwin M., 225 5th St., Jersey City. (9)
 Woelfle, Henry E., 75 Bowers St., Jersey City. (9)
 Wolff, Ferdinand C., 1136 Garden St., Hoboken.
 Wolfson, Joseph, 302 Montgomery St., Jersey C.
 Woodruff, Stanley R., 22 W. 22d St., Bayonne.
 Number members, 150.

HUNTERDON COUNTY.

Society organized June 12, 1821. Annual meeting fourth Tuesday in April.

Secretary,

Sproul, Obadiah H., Flemington. (10)

Treasurer,

Cramer, Isaac S., Flemington. (10)

Censors,

Best, George N., Rosemont. (10)
 Clossen, Edward W., Lambertville. (10)
 Ewing, John H., Flemington. (10)

Johnson, Fred L., Stanton. (10)
 Leidy, Edward D., Flemington. (10)
 Nash, Alfred B., Frenchtown. (10)
 Young, Peter C., Ringoes. (10)

HONORARY MEMBERS.

Loomis, H. P., New York City. (10)
 Wolverton, W. D., U. S. Army, Retired. (10)

Number members, 9.

MERCER COUNTY,

Society organized May 23, 1848. Annual meeting second Tuesday in May.

President,

Weeks, David F., 326 W. State, Trenton. (11)

Vice-President,

McGuire, James J., 330 S. Broad, Trenton. (11)

Secretary,

Mitchell, Chas. H., 116 Centre, Trenton. (11)

Treasurer,

Shepherd, Irenaeus M., 188 S. Broad, Tren. (11)

Reporter,

West, Edgar L., 274 Hamilton ave., Trenton. (11)

Ackley, David B., 878 E. State, Trenton. (11)
 Adams, Chas. F., 52 W. State, Trenton. (11)
 Armstrong, Alex., 323 S. Broad, Trenton. (11)
 Arthur, Francis M., Hamilton Square. (11)
 Barrows, Arthur M., 300 S. Clinton, Trenton. (11)
 Barwis, Elmer, 211 Hamilton ave., Trenton. (11)
 Beatty, Henry M., 50 Centre, Trenton. (11)
 Britton, Chas. P., 126 W. State, Trenton. (11)
 Bruyere, John, 123 Perry, Trenton. (11)
 Cantwell, Frank V., 78 N. Clinton ave., Tren. (11)
 Chattin, J. Franklin, 40 W. State, Trenton. (11)
 Clark, William A., 51 W. State, Trenton. (11)
 Collier, William S., 723 S. Broad, Trenton. (11)

Craythorn, John C., 302 W. State, Trenton. (11)
 Cort, Paul L., 144 W. State, Trenton. (11)
 Costill, Henry B., 506 E. State, Trenton. (11)
 Dey, Addison H., 430 E. State, Trenton. (11)
 Dickinson, Ernest L., 100 Greenwood ave., T. (11)
 Elmer, William, 44 W. State, Trenton. (11)
 Fee, Elam K., Lawrenceville. (11)
 Felty, John C., P. O. Box 258, Trenton. (11)
 Franklin, Geo. H., Highstown. (11)
 Freeman, Samuel, 314 S. Broad, Trenton. (11)
 Funkhauser, Edw. B., P. O. Box 258, Tren. (11)
 Gordon, Clark H., 930 E. State, Trenton. (11)
 Gordon, Edward J., 1010 S. Clinton, Trenton. (11)
 Harman, William J., 1162 E. State, Trenton. (11)
 Harris, Frank, 214 N. Warren, Trenton (11)
 Hawke, Edward S., 124 E. Hanover, Trenton (11)
 Holcombe, Chas. H., 41 W. State, Trenton. (11)
 Hutchinson, A. Dunbar, 419 Chestnut av., Trenton.
 Jenkins, Mozart, 136 Walnut ave., Trenton. (11)
 Kent, Morton M., 231 N. Warren, Trenton. (11)
 Lalor, William S., 220 N. Warren, Trenton. (11)
 MacKenzie, Thos. H., 528 E. State, Trenton. (11)
 MacLaren, William S., Princeton. (11)
 Madden, Walter, 324 S. Broad, Trenton. (11)

MERCER COUNTY—Continued.

Martin, Thaddeus P., 46 Spring, Trenton. (11)
 Moore, Geo. R., 259 Hamilton ave., Trenton. (11)
 Norton, Horace G., 429 E. State, Trenton. (11)
 North, Harry R., 284 Hamilton ave., Trenton. (11)
 Oliphant, Nelson B., 152 W. State, Trenton. (11)
 Parker, Geo. H., 420 E. State, Trenton. (11)
 Pierson, Theodore A., Hopewell. (11)
 Read, Clinton H., 567 S. Warren, Trenton. (11)
 Reddan, Martin W., 113 W. State, Trenton. (11)
 Ridgeway, Geo. M., 140 W. State, Trenton. (11)
 Rogers, Richard R., 110 E. Hanover, Trenton. (11)
 Rogers, Richard R., Jr., 610 Perry, Trenton. (11)
 *Rogers, Elmer H., 126 N. Warren, Trenton. (11)
 Sandy, Wm. C., P. O. Box 258, Trenton. (11)
 Scammell, Frank G., 413 E. State, Trenton. (11)
 Schoening, Gustave A., 223 Perry, Trenton. (11)
 Seeds, John B., 495 Centre, Trenton. (11)
 Shaw, Jos. B., 119 S. Warren, Trenton. (11)

Smith, Houghton, 1007 Division, Trenton. ((1)
 Sommers, Geo. N. J., 229 Perry, Trenton. (11)
 Stevenson, Wm. D., 40 S. Clinton ave., Trenton.
 Taylor, Walter A., P. O. Box 258, Trenton. (11)
 Titus, Geo. E., Hightown. (11)
 Ward, John W., P. O. Box 258, Trenton. (11)
 VanDuyn, William B., 133 Perry St., Trenton. (11)
 Warman, David, 239 Chestnut ave., Trenton. (11)
 Waters, Chas. H., 50 W. Hanover, Trenton. (11)
 Wells, Jos. M., 922 Edgewood ave., Trenton. (11)
 Wikoff, James Holmes, Princeton. (11)
 Wilbur, Wm. L., "Aleda," Hanover st., Tren. (11)
 Yard, Pearson W., 727 S. Broad, Trenton. (11)

HONORARY MEMBERS.

Young, Joseph K., 222 S. 16th, Phila., Pa. (11)
 Allen, Chas. L., Reddant, Calif.

Number members, 73.

*Deceased.

MIDDLESEX COUNTY.

Society organized June 16, 1816. Annual meeting third Wednesday in April.

President,

Carroll, Edgar, Main, Dayton. (12)

Vice-President,

Riva, Ferdinand E., 47 Bayard, New Bruns. (12)

Secretary,

Gutmann, Benjamin, 418 George, New B. (12)

Treasurer,

English, David C., 363 George, New Bruns. (12)

Reporter,

Smith, Arthur L., 62 Bayard, New Bruns. (12)

Albright, John C., 194 Broadway, So. Amboy (12)
 Bissett, John J., Main St., South River. (12)
 Buttler, Charles V., 139 Albany, New Bruns. (12)
 Clark, A. Schuyler, 531 Madison ave., N. Y. (12)
 Clark, Staats V. D., 89 Bayard, New Bruns. (12)
 Condon, William J., 336 George, New Bruns. (12)
 Donohue, Frank M., 139 Albany, N. Bruns. (12)
 Ellis, Alfred L., Main, Metuchen. (12)
 Fithian, George W., 195 High, Perth Amboy. (12)
 Forney, N. N., 50 Livingston av., N. Bruns. (12)
 Gross, Herman D., Main, Metuchen. (12)
 Haines, Edward E., 134 David, So. Amboy. (12)
 Henry, Frank C., 134 State, Perth Amboy. (12)

Howley, Barth. M., 421 George, New Bruns. (12)
 Hunt, A. Clark, Holly, Metuchen. (12)
 Janeway, Henry H., 11 Livingston av., N. B. (12)
 Lund, John L., 181 High, Perth Amboy (12)
 MacDowall, John L., 129 Smith, Perth Am. (12)
 Meinzer, Martin S., 294 Madison av., P. Am. (12)
 Moore, William M., 79 Livingston av., N. B. (12)
 Morrison, Daniel L., 1 Elm Row, New B. (12)
 Ramsay, Wm. E., 193 High, Perth Amboy. (12)
 Rice, J. Warren, 301 George, New Bruns. (12)
 Shannon, Patrick A., 133 Albany, N. Bruns. (12)
 Silk, Charles I., 422 State, Perth Amboy. (12)
 Slack, Clarence M., 50 Livingston av., N. B. (12)
 Spencer, Ira. T., Main, Woodbridge. (12)
 Stephens, David, Addison, N. Y. (12)
 Suydam, John L., Jamesburg. (12)
 Symmes, Henry C., Cranberry. (12)
 Treganowan, Ambrose, Main, South Amboy. (12)
 Tyrrell, George W., 222 State, Perth Amboy. (12)
 Wilson, John G., 186 High, Perth Amboy. (12)
 Woods, A. Lincoln, Main, South River. (12)

HONORARY MEMBERS.

Cooke, Henry G., 7 Livingston av., New B. (12)
 Number members, 39.

MONMOUTH COUNTY.

Society organized June 16, 1816. Annual meeting second Tuesday in December.

President,

Shaw, Harry E., Long Branch. (13)

Vice-President,

Hendrickson, Daniel D., Middletown. (13)

Secretary,

Forman, D. McLean, Freehold. (13)

Treasurer,

Long, Isaac S., Freehold. (13)

Reporter,

Slocum, Harry B., Long Branch. (13)

Anderson, Wm. Edgar, Englishtown. (13)
 Applegate, Asher T., Englishtown. (13)
 Baker, George H., Long Branch. (13)
 Beach, Edward M., West Long Branch. (13)
 Bennett, John W., Long Branch. (13)
 Bennett, Reginald S., Asbury Park. (13)
 Beveridge, William W., Asbury Park. (13)
 Brown, Harvey S., Freehold. (13)
 Campbell, William K., Long Branch. (13)
 Cooke, Henry G., New Brunswick. (13)
 Crater, Ellis W., Ocean Port. (13)
 Disbrow, Vanderhoef M., Lakewood. (13)
 Field, Edwin, Red Bank. (13)
 Havens, Walter P., Farmingdale. (13)

Hepburn, William M., Freehold. (13)
 Hendrickson, Henry A., Atlantic Highlands. (13)
 Hoagland, Garret C., Keyport. (13)
 Ingling, Harry W., Freehold. (13)
 Jackson, Andrew J., Matawan. (13)
 Johnson, Samuel, Asbury Park. (13)
 Kinmouth, William R., Farmingdale. (13)
 Knecht, Cyrus, Matawan. (13)
 Knight, Samuel R., Spring Lake. (13)
 Mitchell, Henry, Asbury Park. (13)
 Partree, Homer T., Eatontown. (13)
 Price, Franklin C., Imlaystown. (13)
 Rafferty, Peter J., Red Bank. (13)
 Roberts, D. Edgar, Keyport. (13)
 Scott, Elmer A., Asbury Park. (13)
 Thompson, Charles H., Belmar. (13)
 Warner, William B., Red Bank. (13)
 Welch, Joseph T., Long Branch. (13)
 Whitmore, Walter S., Red Bank. (13)
 Wilbur, George F., Asbury Park. (13)
 Woolley, Scudder J., Long Branch. (13)

HONORARY MEMBERS.

Welch, George T., Passaic. (13)

Number members, 40.

MORRIS COUNTY.

Society organized June 1, 1815. Annual meeting second Tuesday in March.

President,
Foster, George H., Rockaway. (14)
Vice-President,
Ely, Lancelot, Flanders. (14)
Secretary,
Kice, Henry W., Wharton. (14)
Treasurer,
Douglas, James, Morristown. (14)
Reporter,
Wheeler, Harry S., Whippany. (14)

Adsit, Noble H., Succasunna. (14)
Anderson, Calvin, Madison (14)
Baker, Raymond D., Summit. (14)
Bebout, Theodore W., Stirling. (14)
Becker, Gustav A., Morristown. (14)
Beling, Christopher C., Morris Plains. (14)
Carpenter, Abram E., Boonton. (14)
Carroll, Alexander J., Morris Plains. (14)
Clark, Emma C., Dover. (14)
Condict, Arthur W., Dover. (14)
Cossitt, Harry A., Morris Plains. (14)
Cooper, Edward P., Parsippany. (14)
Cook, Richard L., Dover. (14)
Coultas, Aldo B., Madison. (14)
Day, Harry V., Butler. (14)
Decker, Clinton L., Boonton. (14)
DeGroot, George S., Mendham. (14)
Evans, Britton D., Morris Plains. (14)
Farrow, J. Willard, Dover. (14)
Farrow, Levi, Hackettstown. (14)
Flagge, Frederick W., Rockaway. (14)
Glazebrook, Francis H., Morristown. (14)

Gorton, Eliot, Summit. (14)
Griswold, James B., Morristown. (14)
Haven, Samuel C., Morristown. (14)
Henriques, Henry A., Morristown. (14)
Horsford, Fred. C., Morris Plains. (14)
Johnson, George L., Morristown. (14)
Lewis, Alfred A., Morristown. (14)
Mallon, Peter S., Morris Plains. (14)
McMurtrie, William A., Morristown. (14)
Mial, Leonidas L., Morristown. (14)
Mills, Clifford, Morristown. (14)
Owen, Fred. Wooster, Morristown. (14)
Pierson, Stephen, Morristown. (14)
Pollard, Joseph E., Chatham. (14)
Risk, J. Boyd, Summit. (14)
Ryerson, John G., Boonton. (14)
Seward, Frederick H., Madison. (14)
Simpson, Maxwell S., Middle Valley. (14)
Sutton, Edward, German Valley. (14)
Taylor, John L., Boonton. (14)
Vaughan, Harry, Morristown. (14)
Walters, John, Wharton. (14)
Wigg, Cuthbert, Boonton. (14)
Wilkinson, George W. V., Morristown. (14)
Wolfe, William J., Chatham. (14)

HONORARY MEMBERS.

Condict, Isaiah W., Dover. (14)
Macwithey, Amasa A., Riverdale. (14)
Harris, P. A., Paterson. (16)

ASSOCIATE MEMBERS.

Bishop, Louis F., New York. (14)
Prout, Thomas P., New York. (14)
Number members, 52.

OCEAN COUNTY.

Society organized October 28, 1903. Annual meeting first Wednesday in April.

President,
Jones, Ralph R., Toms River. (15)
Vice-President,
Disbrow, Vanderhoef M., Lakewood. (15)
Secretary,
Heron, Alexander M., Lakewood. (15)
Treasurer,
Pittis, Harold, Lakehurst. (15)
Reporter,
Schauffler, William Gray, Lakewood. (15)

Brouwer, Frank, Toms River. (15)
Buckingham, Frederick S., Lakewood. (15)
Carrigan, Eugene E. S., Point Pleasant. (15)
Disbrow, Edwin C., Toms River (15)
Disbrow, Rem Lefferts, Toms River. (15)
Hance, Irwin H., Lakewood. (15)
Kimball, Paul T., Lakewood. (15)
Lindley, Charles L., Lakewood. (15)
MacMillan, Geo. W., Lakewood. (15)
Thompson, Otto C., Cassville. (15)
Number members, 15.

PASSAIC COUNTY.

Society organized January 14, 1844. Meets second Tuesday in each month, except July, August and September.
Annual meeting second Tuesday in April.

President,
Gillson, John T., 391 Main, Paterson. (16)
Vice-President,
Magennis, Bryan C., 81 Bridge, Paterson. (16)
Secretary,
Marsh, Elias J., Jr., 24 Church, Paterson. (16)
Treasurer,
Tuers, George E., 12 Church, Paterson. (16)
Reporter,
Henion, E. Lucas, 16 Church, Paterson. (16)
Censors,
Gillson, Michael W., 11 Lee Pl., Paterson. (16)
Atkinson, James W., 27 Church, Paterson. (16)
Demarest, Frederick F. C., 29 Academy, Passaic.

Agnew, Frank E., 29 Hamilton, Paterson. (16)
Alexander, Archibald F., 379 Union av., Paterson.
Balleray, George H., 115 B'way, Paterson. (16)

Banta, John H., 119 Broadway, Paterson. (16)
Bergin, Joseph V., 19 Church, Paterson. (16)
Blundell, William, 99 Fair, Paterson. (16)
Bowden, David T., 117 Paterson, Paterson. (16)
Briody, James F., 385 Main, Paterson. (16)
Browne, J. Alex., 310 Grand, Paterson. (16)
Bullen, Victor E., 148 Hamilton ave., Paterson.
Campbell, Charles M., 642 Main, Paterson. (16)
Carroll, William H., 119 Jefferson, Passaic. (16)
Clay, Thomas A., 30 Sheridan ave., Paterson. (16)
Crounse, David R., 84 Bloomfield ave., Pas. (16)
Curts, James H., 30 Church, Paterson. (16)
Curts, Robert M., 30 Church, Paterson. (16)
Davenport, George S., Garfield. (16)
DeJager, Simon, 83 Bridge, Paterson. (16)
Denner, Edward F., 221 B'dway, Paterson. (16)
Donohue, Frank B., 389 Main, Paterson. (16)
Duncan, Owsley B., Haledon. (16)

PASSAIC COUNTY—Continued.

- Dunning, Walter L., 533 River, Paterson. (16)
 Fischer, George, 90 Auburn, Paterson. (16)
 Flitcroft, William, 510 River, Paterson. (16)
 Flood, G. Balleray, 279 B'dway, Paterson. (16)
 Green, William S., 73 Paterson, Paterson. (16)
 Gutherson, Wm. F., 1080 Madison ave., Paterson.
 Harris, Philander A., 26 Church, Paterson. (16)
 Henggeler, Jacob H., 47 Bridge, Paterson. (16)
 Jacob, William H., 95 N. Main, Paterson. (16)
 Johnson, Walter B., 170 B'dway, Paterson. (16)
 Kane, Charles J., 349 Grand, Paterson. (16)
 Kane, Thomas J., 349 Grand, Paterson. (16)
 Keller, Frank J., 379 Totowa ave., Paterson. (16)
 Kip, Henry, 90 Fair, Paterson. (16)
 Koch, George J. P., 130 Beech, Paterson. (16)
 Leal, John L., 156 Ellison St., Paterson. (16)
 Lucas, Henry H., 192 Van Houten, Paterson. (16)
 Luck, Paul M. K., 174 Monroe, Passaic. (16)
 MacAlister, Wm. Wallace, 21 Church, Paterson.
 Maclay, Joseph A., 239 B'dway, Paterson. (16)
 Mackintosh, M. Alex., 237 Broadway, Paterson.
 Marsh, Elias J., 600 Park ave., Paterson. (16)
 McBride, Andrew F., 397 Main, Paterson. (16)
 McClendon, Caesar P., 48 Fair, Paterson. (16)
 McCoy, John C., 292 B'dway, Paterson. (16)
 McDede, Frank, 908 Main, Paterson. (16)
 Merrill, John R., 15 Church, Paterson. (16)
 Millspaugh, Daniel T., 45 Totowa ave., Paterson.
 Morrill, James P., 10 Church, Paterson. (16)
 Neer, Rush, 95 Bridge, Paterson. (16)
 Neer, William, 245 Broadway, Paterson. (16)
 Newton, William K., 379 Ellison, Paterson. (16)
 Norval, William A., 419 Main, Paterson. (16)
 O'Donnell, James, 82 Ward, Paterson. (16)
 Parke, Henry, 9 Church, Paterson. (16)
 Paxton, John P., 560 E. 28th, Paterson. (16)
 Pike, Horace V., Marlboro Mills, Conn. (16)
 Ritter, John J., 16 Smith, Paterson. (16)
 Rogers, Benjamin H., 213 B'dway, Paterson. (16)
 Ryan, John N., 136 Jefferson, Passaic. (16)
 Sandt, Frank R., 466 Park ave., Paterson. (16)
 Scribner, Charles H., 82 Ward, Paterson. (16)
 Stewart, James M., 181 Van Houten, Paterson.
 Stinson, Richard, 158 Broadway, Paterson. (16)
 Sullivan, John J., 51 Passaic ave., Passaic. (16)
 Surnamer, Isaac, 89 Bridge, Paterson. (16)
 Tattersall, Joseph, 1042 Main, Paterson. (16)
 Temple, Arthur H., 164 Jefferson, Passaic. (16)
 Terriberry, George W., 146 B'dway, Paterson.
 Terhune, Percy H., 162 Gregory av., Passaic. (16)
 Todd, Francis H., 218 Broadway, Paterson. (16)
 Utter, Sylvester, 12 Church, Paterson. (16)
 Vanderbeek, Andrew B., 174 B'dway, Paterson.
 Van Ess, John, 53 Bridge, Paterson. (16)
 Van Riper, A. Ward, 207 Main av., Passaic. (16)
 Van Riper, Cornelius, 207 Main av., Passaic. (16)
 Van Noort, Frank J., 393 Main, Paterson. (16)
 Vigna, Fortunato, 35 Ward, Paterson. (16)
 Vreeland, George W., 127 Hamburg av., Paterson.
 Ward, Albert H., 404 Totowa ave., Paterson. (16)
 Yates, John S., 79 Bridge, Paterson. (16)
 Number members, 90.

SALEM COUNTY.

Society organized May 4, 1880. Annual meeting first Wednesday in May.

- President,*
 Hires, Nathaniel S., Salem. (17)
Vice-President,
 Hummel, Lester H., Salem. (17)
Secretary and Treasurer,
 Chavanne, Henry, Salem. (17)
Reporter and Censor,
 Smith, John F., Salem. (17)
Censors,
 De Grofft, Eugene E., Woodstown. (17)
 Harris, Frank B., Canton. (17)
 Bilderbach, Francis, Salem. (17)
 Carpenter, William H., Salem. (17)
 Davis, Richard M., Salem. (17)
 Duffell, Charles, Salem. (17)
 Ewen, Warren L., Alloway. (17)
 Fitch, George W. H., Daretown. (17)
 Garrison, Daniel, Pennsgrove. (17)
 Good, William T., Bridgeton. (17)
 Hilliard, W. T., Salem. (17)
 Husted, Frank B., Quinton. (17)
 James, William H., Pennsville. (17)
 Johnson, Henry T., Pedricktown. (17)
 Sherron, Clifford M., Salem. (17)
 Summerill, John Morris, Pennsgrove. (17)
 Waddington, Benj. A., Salem. (17)
 ASSOCIATE MEMBERS.
 Jaquett, W. A., D. D. S., Salem. (17)
 Number members, 21.

SOMERSET COUNTY.

Society organized May, 1816. Annual meeting second Thursday in April.

- President,*
 Buchanan, J. Hervey, North Plainfield. (18)
Vice-President,
 Davis, Henry V., North Branch. (18)
Secretary,
 Long, William H., Jr., Somerville. (18)
Treasurer,
 Flynn, Thomas H., Somerville. (18)
Reporter,
 Stillwell, Aaron L., Somerville. (18)
Censors,
 Fisher, Claudius R. P., Bound Brook. (18)
 Hecht, John P., Somerville. (18)
 Zeglio, Peter J., North Plainfield. (18)
 Beekman, John B., Pluckamin. (18)
 Cooper, J. Howard, East Millstone. (18)
 Dundon, Arthur H., North Plainfield. (18)
 Gaston, Mary E., Somerville. (18)
 Graff, Effie R., Somerville. (18)
 Halsted, Charles F., Somerville. (18)
 Henry, George, Flemington. (18)
 Hughes, Fred J., North Plainfield. (18)
 McWilliam, John F., Somerville. (18)
 Meigh, Josiah, Bernardsville. (18)
 Merrill, William H., South Branch. (18)
 Taylor, Sewell O. B., Millstone. (18)
 TenEyck, John D., Franklin Park. (18)
 Smalley, Mahlon C., Gladstone. (18)
 Wild, Frederick A., Bound Brook. (18)
 Weeks, Henry M., Skillman. (18)
 HONORARY MEMBERS.
 Ward, John W., Trenton. (18)
 ASSOCIATE MEMBERS.
 Voorhees, E. R., M. D. C., Somerville. (18)
 Number members, 24.

SUSSEX COUNTY.

Society organized August 22, 1829. Annual meeting second Tuesday in May.

President,

Moore, John, Sussex. (19)

Vice-President,

Jones, Edward W., Layton. (19)

Secretary,

Voorhees, Shepard, Newton. (19)

Treasurer,

Morrison, Ephraim, Newton. (19)

Reporter,

Van Gaasbeek, Harvey D., Sussex. (19)

Beatty, Enos E. B., Newton. (19)

Burd, Lewis S., Ogdensburg. (19)

Cole, Martin, Hainesville. (19)

Coleman, Joseph G., Hamburg. (19)
 Dunning, Charles M., Franklin. (19)
 Ferguson, Benjamin W., Beemerville. (19)
 Hood, Bruno, Newton. (19)
 Hughes, Morgan D., Branchville. (19)
 Jacob, Albert N., Sparta (19)
 McCloughan, Harvey J., Newton. (19)
 Miller, John N., Newton. (19)
 Pellett, Jackson B., Hamburg. (19)
 Price, J. Cole, Branchville. (19)

HONORARY MEMBERS.

Andress, T. H., Sparta. (19)
 Hunt, Joseph, Huntsville. (19)
 Davison, C. K., Stanhope. (19)
 Number members, 18.

UNION COUNTY.

Society organized June 7, 1869. Annual meeting second Wednesday in April.

President,

Livengood, Horace R., 1105 E. Jersey, Elizabeth.

Vice-President,

Hedges, Benjamin Van D., Plainfield. (20)

Secretary,

Bunting, P. DuBois, 11 3d, Elizabeth. (20)

Treasurer,

Eaton, Alvin R., Jr., 1157 E. Jersey, Elizabeth.

Reporter,

Shangle, Milton A., 1143 E. Jersey, Elizabeth.

Censor,

Hedges, Ellis W., Plainfield. (20)

McLean, Thomas N., 1144 E. Broad, Elizabeth.

Wilson, Norton L., 410 Westminster av., Elizabeth

Ard, Frank C., Plainfield. (20)

Bailey, Frederick R., 1165 E. Jersey, Elizabeth.

Banker, Pierre A., 1156 E. Jersey, Elizabeth. (20)

Barnes, William M., Springfield. (20)

Boone, William C., Plainfield. (20)

Burnett, Thomas F., 253 Court, Elizabeth. (20)

Carman, John H., Plainfield. (20)

Cladek, Walter E., Rahway. (20)

Clawson, Marcus L., Plainfield. (20)

Coles, J. Ackerman, Scotch Plains. (20)

Conover, John H. P., 1077 E. Jersey, Elizabeth.

Corbusier, Harold D., Plainfield. (20)

Cregar, Peter B., Plainfield. (20)

Currie, Norman W., Plainfield. (20)

Dearborn, Reuben B., 1067 E. Jersey, Elizabeth.

Donovan, Alfred Q., 132 E. Jersey, Elizabeth. (20)

Dolan, Thomas E., 250 1st ave., Elizabeth. (20)

Endicott, George W., Plainfield. (20)

Fritts, John T., Plainfield. (20)

Funk, Joseph, 615 Elizabeth ave., Elizabeth. (20)

Galloway, Geo. E., Rahway. (20)

Gaston, William F., Plainfield. (20)

Gray, John Walter, Summit. (20)

Green, James S., 463 N. Broad, Elizabeth. (20)

Grier, Edgar B., 400 Westminster ave., Elizabeth.

Hamil, Robert H., Summit. (20)

Harrison, Joseph B., Westfield. (20)

Hoagland, B. W., Woodbridge. (20)

Keefe, Stephen J., 1063 E. Jersey, Elizabeth. (20)

Keenan, J. Herbert, 22 W. Jersey, Elizabeth. (20)

Kinch, Frederick A., Westfield. (20)
 Korngut, Samuel, 127 Bond, Elizabeth. (20)
 Laird, George S., Westfield. (20)
 Lamson, William J., Summit. (20)
 Lawrence, Alfred, 1086 Elizabeth ave., Elizabeth.
 Lawrence, William H., Jr., Summit. (20)
 Livengood, Theodore F., 1105 E. Jersey, Elizabeth.
 Long, Monroe D., Plainfield. (20)
 McElroy, Lee, 925 Elizabeth ave., Elizabeth. (20)
 McConnell, Joseph K., Cranford. (20)
 Montfort, Robert J., 1051 E. Jersey, Elizabeth.
 Murray, William H., Plainfield. (20)
 McElhinney, Dennis R., 626 Eliz. ave., Elizabeth.
 Mravlag, Victor, 1062 E. Jersey, Elizabeth. (20)
 *O'Reilly, Edward R., 167 2nd, Elizabeth. (20)
 Pettis, Albert, Plainfield. (20)
 Pettit, Alonzo, 116 W. Grand, Elizabeth. (20)
 Perkins, James L., Cranford. (20)
 Pierson, Fred'k H., 340 Westm'ster av., Elizabeth.
 Pierson, Henry C., Roselle. (20)
 Pierson, H. Morton, Roselle. (20)
 Probasco, John B., Plainfield. (20)
 Probasco, Norman H., Plainfield. (20)
 Prout, Thomas P., Summit. (20)
 Quinn, Stephen T., 326 So. Broad, Elizabeth. (20)
 Reason, John J., Carteret. (20)
 Reilly, John P., 215 Elizabeth ave., Elizabeth. (20)
 Schlichter, Chas. H., 1053 Elizabeth av., Elizabeth.
 Sell, Frederick W., Rahway. (20)
 Shirreffs, Russell A., 1158 E. Jersey, Elizabeth.
 Silvers, Elihu B., 55 Seminary ave., Rahway. (20)
 Sinclair, Robert R., Westfield. (20)
 Stern, Arthur, 218 E. Jersey, Elizabeth. (20)
 Stites, J. A., Springfield. (20)
 Tomlinson, Roland D., Plainfield. (20)
 Tomlinson, Thomas H., Plainfield. (20)
 Turner, William F., 562 Jefferson ave., Elizabeth.
 Vail, James Lindley, Cranford. (20)
 Van Alstyne, William B., Westfield. (20)
 Van Horn, Alfred F., Plainfield. (20)
 Voorhees, Nathaniel W., 297 N. Broad, Elizabeth.
 Wagner, Otto, 1051 Elizabeth ave., Elizabeth. (20)
 Warncke, Frank, 310 First ave., Elizabeth. (20)
 Whitehead, Rufus B., 310 First ave., Elizabeth.
 Number members, 82.

*Deceased.

WARREN COUNTY

Society organized February 15, 1826. Annual meeting any Tuesday (at option of Secretary) in May.

<i>President,</i>	Allen, William C., Blairstown. (21)
Dedrick, Thomas S., Washington. (21)	Barber, Isaac, Phillipsburg. (21)
<i>Vice-President,</i>	Bossard, Harry B., Harmony. (21)
Moore, Edward H., Asbury. (21)	Brasefield, Edgar N., Phillipsburg. (21)
<i>Secretary,</i>	Carhart, Henry O., Blairstown. (21)
Burd, William J., Belvidere. (21)	Curtis, Frank W., Stewartsville. (21)
<i>Treasurer,</i>	Drake, Francis J., Phillipsburg. (21)
Cummins, G. Wyckoff, Belvidere. (21)	Haggerty, Frederick W., Vienna. (21)
<i>Reporter,</i>	Hoagland, Lewis B., Oxford. (21)
Griffith, John H., Phillipsburg. (21)	Osmun, Louis C., Hackettstown. (21)
<i>Censors,</i>	Reese, James M., Phillipsburg. (21)
Johnson, John C., Blairstown. (21)	Smith, Charles B., Washington. (21)
LaRiew, Frederick J., Washington. (21)	Storm, Walter, Hope (21)
Williams, Charles M., Washington. (21)	Tunison, G. Orlando, Oxford. (21)
Albertson, William C., Belvidere. (21)	Van Syckle, Alva C., Hackettstown. (21)
	Number members, 24.

SUMMARY.

Atlantic	55	Middlesex	39
Bergen	47	Monmouth	40
Burlington	33	Morris	52
Camden	85	Ocean	15
Cape May	23	Passaic	90
Cumberland	40	Salem	21
Essex	287	Somerset	24
Gloucester	25	Sussex	18
Hudson	150	Union	82
Hunterdon	9	Warren	24
Mercer	73	Total	1232

Each member is requested to see that his name and post office address are correctly given in these lists.

Any errors should be immediately reported to the Secretary so that the alphabetical list which will be published in the next issue may be absolutely correct.

It is especially desired to print all of the initials as well as the last name and in every case the first or middle name should be given in full.

The L. J. Hardham Co., 243 Market St., Newark, have offered to bind the third volume of the Journal in the same style (Buckram) as that used for the past two years, at a cost of 50c per volume. Members desiring to have their Journals bound should send them to Mr. Hardham at once.

Missing numbers can be supplied by the Committee on Publication, on application to Wm. J. Chandler, South Orange. There are still on hand files of the Journal for the two previous years and persons wishing to complete their sets should make application before the supply is exhausted.

WM. J. CHANDLER, Secretary.

THE MEDICAL SOCIETY OF NEW JERSEY.

Next Annual Meeting at Cape May, June 23-25, 1908.

OFFICERS.

<i>President</i> , EDWARD J. ILL.....Newark.	<i>Corresponding Secretary</i> , DANIEL STROCK.....Camden.
<i>First Vice-President</i> , DAVID ST. JOHN.....Hackensack.	<i>Recording Sec'y</i> , WM. J. CHANDLER.....South Orange.
<i>Second Vice-President</i> , B. A. WADDINGTON.....Salem.	<i>Treasurer</i> , ARCHIBALD MERCER.....Newark.
<i>Third Vice-President</i> , THOMAS H. MCKENZIE.....Trenton.	

TRUSTEES.

CHARLES J. KIPP, <i>Chairman</i>Newark	CLAUDIUS R. P. FISHER.....Bound Brook
DAVID C. ENGLISH, <i>Secretary</i>New Brunswick	LUTHER M. HALSEY.....Williamstown
JOHN C. JOHNSON.....Blairstown	JOHN D. MCGILL.....Jersey City
JOHN W. WARD.....Trenton	EDMUND L. B. GODFREY.....Camden
H. GENET TAYLOR.....Camden	HENRY MITCHELL.....Asbury Park
ELIAS J. MARSH.....Paterson	WALTER B. JOHNSON.....Paterson
GEORGE T. WELCH.....Passaic	ALEXANDER MARCY, JR.....Riverton
JOHN G. RYERSON.....Boonton	EDWARD J. ILL.....Newark
OBADIAH H. SPROUL.....Flemington	DAVID ST. JOHN.....Hackensack
WILLIAM ELMER.....Trenton	WILLIAM J. CHANDLER.....South Orange
THOMAS J. SMITH.....Bridgeton	

COUNCILORS.

First District—(Sussex, Warren, Morris and Essex Counties).....	THOS. W. HARVEY, Orange
Second District—(Union, Bergen, Hudson and Passaic Counties).....	J. L. LEAL, Paterson
Third District—(Mercer, Middlesex, Somerset and Hunterdon Counties).....	W. A. CLARK, Trenton
Fourth District—(Camden, Burlington, Ocean and Monmouth Counties).....	WM. H. ISZARD, Camden
Fifth District—(Cape May, Cumberland, Atlantic, Gloucester and Salem Counties).....	PHILIP MARVEL, Atl. City

Committee on Publication.

WM. J. CHANDLER, <i>Chairman</i> , South Orange.....	<i>ex-officio</i>
CHAS. J. KIPP, Newark.....	Term expires 1908
ELLIS W. HEDGES, Plainfield.....	" " 1908

Committee on Scientific Work.

NORTON L. WILSON, <i>Chairman</i> , Elizabeth.....	Term expires 1909
TALBOT R. CHAMBERS, Jersey City.....	" " 1908
ELIAS J. MARSH, JR., Paterson.....	" " 1910

Committee on Credentials

DANIEL STROCK, <i>Chairman</i>	Camden
ARCHIBALD MERCER.....	Newark
THEODORE SENSEMAN.....	Atlantic City

Committee on Honorary Membership.

H. GENET TAYLOR, <i>Chairman</i>	Camden
ELIAS J. MARSH.....	Paterson
LUTHER M. HALSEY.....	Williamstown

Committee on Program.

WM. J. CHANDLER, <i>Chairman</i> , South Orange.....	<i>ex-officio</i>
ALEXANDER MCALISTER, Camden.....	Term expires 1908
FREDERICK F. C. DEMAREST, Passaic.....	1909

Committee on Finance.

DAVID C. ENGLISH, <i>Chairman</i>	New Brunswick
HENRY MITCHELL.....	Asbury Park
WILLIAM ELMER.....	Trenton
WM. J. CHANDLER.....	South Orange

Committee on Business.

JOHN P. HECHT, <i>Chairman</i>	Somerville
WALTER E. HALL.....	Burlington
PHILANDER A. HARRIS.....	Paterson

JAMES HUNTER, JR.....	Westville
EMERY MARVEL.....	Atlantic City

Committee on Prize Essay.

CHARLES J. KIPP.....	Newark
DAVID C. ENGLISH.....	New Brunswick
WILLIAM ELMER.....	Trenton

Committee on Arrangements.

DANIEL STROCK, <i>Chairman</i>	Camden
PAUL M. MECRAY.....	Camden
JAMES MECRAY.....	Cape May
VIRGIL M. D. MARCY, JR.....	Cape May
ENOCH HOLLINGSHEAD.....	Pemberton
HARRY A. STOUT.....	Wenonah

Committee on Public Hygiene and Legislation.

L. M. HALSEY, <i>Chairman</i> , Williamstown.....	Term expires 1910
WILLIAM ELMER, Trenton.....	" " 1908
AARON K. BALDWIN, Newark.....	" " 1908
HENRY H. DAVIS, Camden.....	" " 1910
WILLIAM G. SCHAUFFLER, Lakewood.....	" " 1909
FRANK D. GRAY, Jersey City.....	" " 1909

Committee on Medical Defense.

WILLIAM G. SCHAUFFLER.....	Lakewood
THOMAS N. GRAY.....	East Orange
WILLIAM P. MELCHER.....	Mt. Holly

Delegates to the American Medical Association.

ELIAS J. MARSH, Paterson.....	Term expires 1908
CHARLES J. KIPP, Newark.....	" " 1909
LUTHER M. HALSEY, Williamstown.....	" " 1909

Alternate Delegates.

FRANK D. GRAY, Jersey City, and WM. S. LALOR, Trenton.	
--------------------------------------------------------	--

PRESIDENTS, SECRETARIES AND REPORTERS OF COUNTY SOCIETIES.

County	President	Secretary	Reporter
ATLANTIC.....	E. C. Chew, Atlantic City.....	Wm. F. Ridgway, Atlantic City...	A. Burton Shimer, Atl. City
BERGEN.....	Alfred W. Ward, Closter.....	Daniel A. Currie, Englewood....	Chas W. Harreys, Ridgewood
BURLINGTON.....	Joseph Stokes, Moorestown.....	George T. Tracy, Beverly.....	Wm. P. Melcher, Mt. Holly
CAMDEN.....	Sylvan G. Bushey, Camden.....	Daniel Strock, Camden.....	Henry H. Sherk, Camden
CAPE MAY.....	Nathan A. Cohen, Wildwood.....	M. F. Lummis, Holly Beach.....	M. F. Lummis, Holly Beach
CUMBERLAND.....	Elton S. Corson, Bridgeton.....	A. J. Mander, Millville.....	S. M. Wilson, Bridgeton
ESSEX.....	Herman C. Bleyle, Newark.....	Ralph H. Hunt, East Orange....	Frank W. Pinneo, Newark
GLOUCESTER.....	M. Jones Luffbary, Glassboro....	George E. Reading, Woodbury....	Howard A. Wilson, Woodbury
HUDSON.....	Frank D. Gray, Jersey City.....	Arthur P. Hasking, Jersey City...	A. A. Strasser, Arlington
HUNTERDON.....	Morris H. Leaver, Quakertown...	O. H. Sproul, Flemington.....	Leon T. Salmon, Lambertville
MERCER.....	David F. Weeks, Trenton.....	Charles H. Mitchell, Trenton....	Edgar L. West, Trenton
MIDDLESEX.....	Edgar Carroll, Dayton.....	Benj. Gutmann, New Brunswick...	A. L. Smith, New Brunswick
MONMOUTH.....	Harry E. Shaw, Long Branch.....	D. McLean Forman, Freehold....	Harry B. Slocum, Long Branch
MORRIS.....	George H. Foster, Rockaway.....	H. W. Kice, Wharton.....	H. S. Wheeler, Whippany
OCEAN.....	Ralph H. Jones, Toms River.....	Alex. M. Heron, Lakewood.....	Wm. G. Schaffner, Lakewood
PASSAIC.....	John T. Gilson, Paterson.....	E. J. Marsh, Jr., Paterson.....	E. Lucas Henion, Paterson
SALEM.....	Nathaniel S. Hires, Salem.....	Henry Chavanne, Salem.....	John F. Smith, Salem
SOMERSET.....	J. Hervey Buchanan, N. Plainfield..	Wm. H. Long, Somerville.....	Aaron L. Stillwell, Somerville
SUSSEX.....	John Moore, Sussex.....	Shepherd Voorhees, Newton.....	H. D. Van Gaasbeek, Sussex
UNION.....	Horace R. Livengood, Elizabeth....	P. Du Bois Bunting, Elizabeth....	Milton A. Shangle, Elizabeth
WARREN.....	Thos. S. Dedrick, Washington.....	Wm. J. Burd, Belvidere.....	J. H. Griffith, Philipsburg

The Secretary of the component society should promptly notify the recording secretary of the Medical Society of New Jersey of any error or change in these offices.

A List of the Physicians practising in New Jersey and not included among the members of the Medical Society of New Jersey.

Absecon, 530, Atlantic.

Allen, Chas. Clifford—H—Pa.9,'98; (1 1898).

Atlantic City, 27,838, Atlantic.

Bailey, Alfred Wm. (b. 1857)H—Pa.9,'86; (1 1886)
1809 Pacific Ave.; 9-11, 2-4.

Ball, Arthur W.—Pa.9,'97; (1 1901); 1722 Pacific Ave.

Balliet, Lorenzo Dow (b 1846)—H—Pa.9,'80; (1 1894); 1001 Atlantic Ave.

Barnes, Percy L. (b 1877)H—O.13,'05; (1 1905);
800 Pacific Ave.; 8-10, 2-4, 7-8.

Beckwith, John C.—O.26,'85; (1 1903); 104 S. Ohio Ave.

Bennett, Francis W. (b 1867)—Pa.1,'91; (1 1891);
1710 Pacific Ave.; 9-11.

Berner, David A.—LeGrand Apts.
Pa.11,'01; (1 1903).

Bewley, Lylburn H.—Pa.9,'01; (1 1901); 1207 Pacific Ave.

Bickel, Saml. D.—Pa.1,'95; (1 1898).

Butcher, O. L.—P.M.; New York Ave. and Boardwalk.

Castle, F. B.—Hotel Chelsea Haven.

Crosby, Geo. W. (b 1851)H—N.Y.9,'78; (1 1882);
714 Atlantic Ave.; until 10, 2-4, 7-8.

DeSilver, Jos. F.—Galbraith Apts.
Pa.1,'00; (1 1900).

Divine, Jane S.—Pa.7,'87; (1 1890).

Doriss, H. Stokes—119 So. Carolina Ave.
Pa.11,'03; (1 1903).

Durand, J. I.—Minn.4,'05; (1 1906); 1616 Pacific Ave.

Filbert, C. E.—Morris and Atlantic Aves.
Pa.1,'96; (1 1900).

Fleming, John R.—H—Pa.9,'82; (1 1882); 1904 Pacific Ave.

Fletcher, George Howard (b 1858)—D.C.3,'92; (1 1892); 1910 Arctic Ave.

Gardiner, Wm. G.—Pa.9,'88; (1 1892); 1303 Pacific Ave.

Hawkins, P. Long (b 1880)—N.C.3,'03; (1 1903);
1813 Arctic Ave.

Hughes, Jas. Wm.—Pa.9,'00; (1 1900); 1904 Pacific Ave.

Ingram, Nelson—N.Y.10,'65; (1 1888); Preston Apartments.

Jackson, Geo. G. (b 1877)H—Pa.9,'99; (1 1899);
1900 Pacific Ave.; 8-10, 2-3, 7-8.

Jones, Frank E.—P.M.; 517 Oriental Ave.

Kew, Arthur S.—P.M.; New York and Boardwalk.

Lawrence, H. R.—1721 Boardwalk.

Lyon, Melvern S. (b 1858)H—Pa.9,'89; (1 1889);
716 Atlantic Ave.; 8-10, 2-4, 7-9.

Ludy, Robt. B.—Tenn. and Pacific Aves.

Marcus, Herman D.—Pa.11,'91; (1 1901); 1301 Pacific Ave.

McCall, Floyd H.—P.M.; 191 So. Penn. Ave.

Morrow, Llewella M.—Mich.1,'05; (1 1905); Galen Hall.

Metzler, Victor W.—LeGrand Apts.
Pa.2,'98; (1 1899).

Miller, Mary—H—Lithville.

Morris, S. LeRoy—D.C.3,'95; (1 1896); No. N. Y. Ave.

Munson, Milton L. (b 1853)H—Pa.9,'90; (1 1890);
1503 Pacific Ave.; 8-10, 2-3, 7-8.

Ralston, G. F.—Pa.2,'86; (1 1905); 6 S. Illinois Ave.

Reed, Talbot—104 So. Rhode Island Ave.
Pa.1,'94; (1 1894).

Scull, J. I.—Atlantic City.

Schoeffer, Lalla R.—P.M.—517 Oriental Ave.

Shivers, C. Hendry—Pa.2,'72; (1 1880); 8 S. New Hampshire Ave.

Snowball, Jas. Wm. (b 1865)—Pa.2,'91; (1 1891);
1519 Pacific Ave.; until 10, 1-3, 6-8.

Snyder, Oscar J.—P.M.—Boardwalk and So. Penn.

Sooy, Walter C.—H—Pa.9,'90; (1 1890); 1921 Pacific Ave.

Stickney, Q. D.—Pa.9,'02; (1 1903); 922 Pacific Ave.

Stille, Saml.—Pa.1,'75; (1 1880); 1544 Atlantic Ave.

Swinburn, A. H.—H—321 Atlantic Ave.

Terry, E. Brewster—D.C.3,'03; (1 1903); 34 N. Ohio Ave.

Thompson, Jesse B.—Pa.1,'88; (1 1889); Hotel Chelsea.

Thompson, W. P.—Atlantic City Hospital.

Walter, Harry—P.M.—1700 Pacific Ave.

Wescoat, A. S.—Pa.9,'03; (1 1903); 803 Atlantic Ave.

Westney, Alfred W.—Pa.9,'97; (1 1897); 12 Pacific Ave.

Wood, Charlotte G.—P.M.—1306 Pacific Ave.

Youngman, Maurice D.—H—N.Y.9,'80; (1 1881);
1618 Pacific Ave.

Youngman, Thomas—Pa.9,'04; (1 1904); 1618 Pacific Ave.

Bakersville, Atlantic.

Gehring, G. P.

Egg Harbor City, 1,808, Atlantic.

Elmer, John Ulric (b 1854)—Univ. of Munich, Germany, '83; (1 1883); 7-8, 1-2, 7-8.

Hammonton, 5,000, Atlantic.

Bitler, Jos. Clarence (b 1874)—Pa.9,'99; (1 1899);
325 Bellevue Ave.; until 9, 6-8.

Crowell, Godfrey M.—Pa.2,'82; (1 1888).

Cunningham, Chas. (b 1869)—Pa.2,'94; (1 1894).

Nivison, Samantha S.—Pa.7,'55; (1 1884).

Tomlin, Henry H.—H.

Linwood, 495, Atlantic.

Steelman, Philip S. (b 1868)—Pa.1,'94; (1 1895).

Pleasantville, 3,200, Atlantic.

Lake, Eva. W.—Pa.7,'91; (1 1894).

North, Jos. H., Jr.—Pa.2,'69; (1 1881).

Sooy, R. M.—Md.3,'84; (1 1884).

H. homeopath; E. eclectic; P-M. physio-medic;
* information regarding graduation not obtained;
(Y. of P.) in practice before passage of present
law, or licensed by virtue of a certain number of
years of practice; figures in parentheses refer to
dates of birth and state license; (1+) licensed but
date not given.

Allendale, 694, Bergen.

Parkhurst, Gabriel H. (b 1836)—N.Y.9,'61; (1 1884).

East Rutherford, Bergen.

Brooks, Charles D.—N.Y.10,'93; (1 1894).

Englewood Cliffs, 850, Bergen.

Langdon, Robert M.—N.Y.8,'90.

Langdon, Marie G.—Pa.7,'05; (1 1905).

Englewood, 6,253, Bergen.

Best, Geo. B.—H—N.Y.9,'87; (1 1887).

Cantrell, Robt.—(1897).

Huff, Edmund N. (b 1878)H—Pa.9,'00; (1 1900); Tenny Rd.; 8-10, 12-2, 6-8.

Fort Lee, Bergen.

Nichols, Isaac D.—Bell,'86.

Hackensack, 9,443, Bergen.

Adams, Chas. Francis (b 1857)—H—N.Y.9,'84; (1 1884); 229 Union St.; 1-2:30, 6-8.

Baviocos, A. A.—P.&S., '70.

Brough, Frank T.—P.&S., '89.

Brown, Alice—Mich.1,'98.

Brown, Geo. Edwin—N.Y.1,'75; (1 1880).

Brown, J. Morris—Pa.1,'62.

Harris, Nelson A. (b 1860)—N.Y.9,'81; (1 1893); 339 Union St.; 12:30-2.30, 7-8.

Knapp, L. P.—N.Y.1,'93; (1 1893).

Knox, Harriet L. (b 1873)—N.Y.14,'94; (1 1897); 350 Union St.; 1-3, 6:30-7:30.

LaPinto, John L—Univ. of Naples, Italy, '96; (1 1901).

McDonald, Harry Geo. (b 1879)—Md.3,'03; (1 1903); 120 State St.; until 9, 1-3, 6-8.

Robinson, Geo. Willis—Pa.'95.

Hasbrouck, 1,650, Bergen.

Morris, Stephen V. (b 1856)—* 22 Division Ave.; until 8, until 8.

Hasbrouck Heights.

Davis, Josephine G.—Pa.7,'77.

Jenty, Otto F.—N.Y.'64.

Lodi, 1,917, Bergen.

Breevoort, Henry H. (b 1873)—Mich.1,'00; (1 1900); Main St.

Midland Park, 1,660, Bergen (New Milford P. O.).**Oakland, 230, Bergen.**

Hamilton, E. W.—N.Y.9,'86; (1 1888).

Oradell, 250, Bergen.

Ackerman, Wm. P.—N.Y.10,'70; (1 1889).

Vandewater, S. A.—N.Y.19,'04.

Ramsey, 590, Bergen.

Collins, Jas. W.—N.Y.10,'63; (1 1880).

DeYoe, Chas. P.—Md.1,'83; (1 1883).

Ridgefield Park, 1,359, Bergen.

Underwood, Benoni F. (b 1843)—Pa.9,'68; (1 1890); Edgwater Ave., West; 8-10, 5-7.

Ridgewood, 2,685, Bergen.

Cosine, Garret—Bell,'68.

Hutton, Robt. LeRoy—N.Y.20,'05; (1 1905); 21 Union St.

Ockford, Geo. M. (b 1845)—O.26,'72; (1 1875); 36 Oak; until 9, 6-8.

Underwood, Benoni F.—Pa.9,'68.

Rutherford, 4,411, Bergen.

Byers, Clarence W. (b 1877)—N.Y.8,'02; (1 1904); 1 Lincoln Ave.; 1-3, 7-9.

Clarke, John Wm.—Pa.11,'01; (1 1906); (Kings-land).

Cropsy, Chas. D.—H—N.Y.9,'92; (1 1892).

Davies, John H.—1888.

Hollister, Horace H.—N.Y.9,'74; (1 1877).

Westwood, 828, Bergen.

Levitas, Geo. M.—N.Y.8,'04; (1 1906).

Smith, Benj. F. (b 1846)—N.Y.13,'81; (1 1881); Jefferson and Railroad Ave.; 9-5.

Stone, Burton D. (b 1859)—N.Y.5,'82; (1 1897); 6-8.

H. homeopath; E. eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1+) licensed but date not given.

Beverly, 1,950, Burlington.

Currie, Joseph J.—Pa.6,'66.

Giberson, William H.—Pa.2,'96; (1 1899).

Roberts, Jas. V.—Pa.9,'73; (1 1894).

Bordentown, 4,110, Burlington.

Leedom, Ira C.—Pa.9,'94; (1 1894).

O'Brien, John J.—Pa.11,'02; (1 1902).

Tebo, Levi D. (b 1845)—Pa.9,'73.

Brown's Mills, 300, Burlington.

Keeley, R. N.—Pa.2,'82.

Burlington, 7,392, Burlington.

Davis, Jacob M.—Pa.9,'99; (1 1899).

Dingee, Chas.—Pa.1,'87; (1 1896).

Gauntt, F. Allen—Pa.2,'86; (1 1890).

Rink, Eugene F.—Pa., 11*.

Columbus, 535, Burlington.

Bullock, Edward C.—Pa.2,'06.

Coward, A.—*

Zeitler, August E.—Pa.6,'67.

Crosswicks, 460, Burlington.

Brown, David Posey (b 1878)—Pa.9,'01; (1 1903); 8-9, 12-1, 6-7.

Dey, Charles L.—*

Delanco, 712, Burlington.

Weiler, Harry K.—Pa.9,'83.

Georgetown, 79, Burlington.

Patterson, Austin H.—N.Y.5,'73; (1 1884).

Grantwood, Bergen.

Brewster, Guy Otis—Pa.2,'96; (1 1904).

Jacobstown, Burlington.

Shaw, Amos.—*

Lower Bank, 69, Burlington.

Carey, John E.—*

Marlton, 650, Burlington.

Brick, B. K.—Pa.1,'99.

Stroud, P. V. B.—Pa.1,'61.

Woolston, Elijah B.—Pa.1,*.

Medford, 1,100, Burlington.

Braddock, Richard S.—Pa.2,'75; (1 1880).

Haines, Willets P. (b 1873)—(1 1898); 56 N. Main St.; until 9, 1-2, 7-8.

Sharp, Lewis L.—H—Pa.9,'94; (1 1888).

Moorestown, 3,000, Burlington.

Hewlings, Isaac W.—Pa.2,*.

Powell, Benj. B.—Pa.9,'97; (1 1897).

Richie, Elisha Roberts (b 1877)—Pa.2,'02; (1 1902); (1 1897); 416 Chester Ave.; 8-9, 1-2, 7-8.

Thorne, Nathan (b 1874)—Pa.9,'98; (1 1898); 77 E. Main St.; 7:30-9, 2-3, 7-8.

Mount Holly, 4,500, Burlington.

Branin, John W.—Pa.9,'88; (1 1888).

Farrenger, Howard R.—Pa.9,'97.

Harker, Chas.—Pa.2,'84; (1 1890).

Vanderveer, Geo. W.—Pa.9,'73.

Whitehead, Eugenia—Pa.7,'92.

Whitehead, Wm. W.—Pa.9,*.

Palmyra, 2,200, Burlington.

Lore, Andrew P. (b 1874)—Pa.2,'06; (1 1906).

Sharp, Lewis L. (b 1864)—Pa.9,'88; (1 1888); 9-10, 7-8; (Riverton, 11 and 5).

Riverside, 2,500, Burlington.

Cassaday, A. W.—N.Y.10,'95; (1 1897).

Eastwood, Edmund (b 1881)—Pa.2,'03; (1 1903).

Lambert, Chauncey—Pa.9,'04; (1 1904).

Riverton, 1,332, Burlington.

Mills, Charles S.—Pa.9,'00; (1 1900).

Sykesville, 132, Burlington.

Maine, Elias D.—N.Y.1,'77.

Vincenttown, 722, Burlington.

Brown, John C. (b 1856)—Pa.1,'79; Main and Pleasant Sts.; 7-9, 12-2, 7-9.

H, homeopath; E, eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1†) licensed but date not given.

Atco, 307, Camden.

Hovender, J. Irwin—H—Pa.9,'84; (1 1887).

Berlin, 829, Camden.

Raughley, Wm. C.—Pa.1,'84.

Sharp, Edgar B. (b 1855)—H—Pa.9,'76; (1 1880); Main St.; 7-9, 1-2, 7-8:30.

Camden, 75,935, Camden.

Andrews, Purnell W.—H—Pa.6,* (1 1880); 327 Market St.

Artz, Jerome L. (b 1860)—H—Pa.9,'81; (1 1885); 3000 Westfield Ave.; until 10, 2-3.

Barrett, F. C.—Pa.9,'91; 442 Broadway.

Barrett, Wesley J. (b 1874) H—Pa.9,'01; (1 1901); 442 Broadway; 7-9, 1-3, 6:30-8:30.

Bennett, Samuel—* (1 1896); 217 Market St.

Bicker, Francis J.—Pa.2,'90; 1701 Fillmore St.

Bonwill, Harry G.—Pa.2,'86; 921 S. 5th St.

Branch, Clement T.—D.C.3,'00; (1 1900); 910 S. 8th St.

Brinkerhoff, E. F.—Pa.11,'00; N.-W. cor. 5th and State Sts.

Brinkerhoff, Nelson M.—Pa.11,'00; (1 1900); 439 State St.

Bushey, Harry F.—Md.6,'04; (1 1904); 701 Pine St.

Davis, Albert B. (b 1879)—Pa.1,'04; (1 1905); 511 Cooper St.; 9-10, 1:30-3; office, 3d and Washington Sts.; 8-9, 7-8.

Davis, John B. (b 1845)—Pa.2,'70; (1 †); office, 205 N. 6th St.

Donges, Clarence B.—Pa.2,'91; (1 †); 525 Broadway.

Doran, John G.—Pa.1,'87; (1 1886); 207 N. 6th St.

DuBois, Wallace G.—H—Pa.9,'80; (1 1880).

Durant, Horace B.—* 763 Carman St.

Garrison, Howard C. (b 1864)—H—Pa.9,'94; (1 1894); office, 428 N. 5th St.

Grace, Harry H.—H—Pa.9,'96; (1 1896); 303 Cooper St.

Grindle, Wesley—* 522 N. 5th St.

Griscom, Lee Eaton—H—Pa.9,'95; (1 1895); 604 Broadway.

Grumbrecht, Oscar L. (b 1866)—H—Pa.9,'90; (1 1891); 611 Market St.; 8-9, 2-3, 7-8.

Hadley, Chas. F. (b 1878)—H—Pa.9,'99; (1 1899); 3320 Federal St.; until 9:30, 1:30-3, 6:30-8.

Hallinger, Earl S.—H—Pa.9,'03; (1 1903); 1631 Broadway.

Hatton, Louis—H—Pa.1,*; (1 1880); 421 Market St.

Henry, Geo. W. (b 1858)—Pa.2,'85; (1 1885); cor. 8th and Walnut Sts.; 9-10, 1-3, 6-8.

Howard, Erving M. (b 1848)—H—Pa.9,'77; (1 1880); 401 Linden St.; 8-9, 2-3, 7-8.

Howell, Aaron (b 1846) H—Pa.2,'87; (1 1886); 111 N. 6th St.; 7-9, 1-8.

Howell, Mary Anna (b 1847 H—Pa.7,'91; (1 1891) 111 N. 6th St.; 9-11, 2-9.

Hummell, Ernest G.—Md.4,'02; (1 1902); 436 State St.

Ironside, Allen S.—H—Pa.9,'89; (1 1889); 509 Broadway.

Johnson, Chas. H.—Pa.2,'84; (1 1890); 330 Carteret St.

Knight, Geo. B.—3406 Federal St.

Knowlton, Wm. W.—H—Pa.9,'93; (1 1893); 620 Benson St.

Lee, Thos. B.—Pa.1,'76; 601 Walnut St.

Lee, Thos.—Pa.1,'05; 601 Walnut St.

Longshore, John B. (b 1821)—Pa.3,'46; 510 N. 4th St.

McGeorge, Wallace (b 1843)—H—Pa.6,'68; 521 Broadway; until 9, 1-3, 6-8.

McGrath, Wm. H.—* 903 N. 2d St.

Mahafferty, J. C.—Pa. *92; 7th and Elm Sts.

Middleton, Melbourne F.—H—Pa.9,'68; (1 1880); 227 Cooper St.

Moslander, Wm. S. (b 1860)—H—Pa.9,'89; (1 1889); 901 Cooper St.; 8-10, 1:30-3, 7-9.

Parry, E.—10th St. and Penn.

Pfeiffer, Fredk P.—Pa.1,'63; (1 1883); 124 Cooper St.

Read, C. H.—H.

Reader, Addison B.—Md.4,'98; (1 1901); 1135 Kaighn Ave.

Roberts, Jos. E.—Pa.1,'03; (1 1903); 401 Broadway.

Robinson, Frank N. (b 1874)—Pa.1,'95; (1 1895); 518 Linden St.; 8-11.

Rowntree, L. G.—H—937 N. 27th St.

Silvara, J. W.—Pa.2,'74; (1 1886); 207 Temple Bldg.

Singley, Wm. L.—* 1149 N. 34th St.

Smith, Robert M.—H—Ill.10,'04; (1 1904); 1643 Broadway.

Smith, Saml. Bryan—H—Pa.9,'88; (1 1888); 223 Broadway.

Sorin, Herman M.—Pa.2,'02; (1 1902); 1006 Newton Ave.

Taylor, John W.—* (1 1893); 439 Washington.

Tullis, Eli R.—H—Pa.9,'80; (1 1880); 403 Stevens St.

Ward, Lettie A.—Pa.7,'98; (1 1898); 706 Broadway.

Webb, John W.—Pa.2,'66; (1 1882); 808 Haddon Ave.

West, Maximilian (b 1841)—Pa.1,'75; (1 1880); 615 Market St.; 9:30-8:30.

Wood, Geo. B.—Pa.*'98; Broadway and Washington St.

Woodward, Geo. D.—Pa.9,'84; 211 Broadway.

Wynn, Ephriam S.—Pa.2,'72; 321 N. 3d St.

Collingswood, 1,633, Camden.

Hoffman, Ernest Rutherford—Pa.11,'04; (1 1905).

Massinger, Chas. Jerome (b 1868)—Pa.2,'90; 616 Stokes Ave.; until 9, 12-1, 6:30-8.

Sheldon, Edw. S. (b 1874)—H—Pa.9,'95; (1 1895); 207 Massy St.; 7-9, 1-3, 6-8.

Gloucester City, 6,840, Camden.

Beek, John Alonzo—Pa.2,'91; (1 1901).

DeLap, Wm. L. (b 1855)—H—Pa.9,'86; (1 1888); 525 Monmouth St.; until 9, 12-2, after 6.

McLennan, Wm. F.—Pa.11,'96; (1 1896).

Ross, Seaver C.—Mich.1,'81; (1 1889).

Haddonfield, 2,776, Camden.

Bayley, Neston D.—Pa.9,* (1 1888).

Blackwood, Jas. W. (b 1875)—H—Pa.9,'01; (1 1901); 45 E. Main St.; until 9, 2-4, 7-9.

Clement, Edgar (b 1866)—H—Pa.9,'98; (1 1899); 124 W. Main St.; until 9, 1-2, 7-9.

Clement, Lavina B. (b 1867)—Pa.7,'94; (1 1900); 124 W. Main St.; 9-11.

Iszard, Ralph J.—Pa.9,'00; (1 1900).

Long, Wm. S. (b 1855)—Pa.1,'78; (1 1885); 32 W. Main St.; 1-2, 6:30-8.

Tomlin, Francis H.—H.

Williams, Franklin E. (b 1875)—H—Pa.9,'79; (1 1880); 8 W. Main St.; 7:30-9, 1-3, 6-8.

Haddon Heights, 110, Camden.

Brown, Henry—Pa.2,* (1 1904).

Wildman, Elias—Pa.1,'82.

Laurel Springs, 161, Camden.

Cook, Frank B. (b 1876)—Md.6,'04; (1 1904); 7-9, 2:30-3:30, 7-9.

Merchantsville, 1,608, Camden.

Armstrong, Wm. H.—Pa.9,'96; (1 1897).

Hoffman, Herbert—H.

Jennings, Chas. H. (b 1858)—Pa.2,'89 (1 1889); 13 N. Center St.; 8-9, 1-4, 7-8.

Lawrence, Jos. D.—H—Pa.9,'93; (1 1895).

H. homeopath; E. eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Cape May, 2,257, Cape May.

Phillips, E. H.—Pa.9,'68; (1 1880).

Phillips, Walter Hand—H—Pa.2,'92; (1 1900).

Ritter, Fredk. Wm.—Pa.2,'01; (1 1903).

Stevens, Albert Gallatin—H—Pa.9,'92; (1 1898).

Tucker, Henry—Pa.2,'94; (1 1903).

Wales, Wesley Rogers—Pa.2,'91; (1 1892).

Williamson, Jesse—Pa.2,'73; (1 1898).

Wilson, John Herbert—Md.4,'90; (1 1890).

Cape May Point, 153, Cape May.

Howland, Edw. Demonte—Ill.1,'86; (1 1890).

Kirkpatrick, Andrew B.—Pa.2,'84; (1 1884).

Royce, Chas. Clifton—Pa.2,'99; (1 1899).

Dias Creek, Cape May.

Hand, John H.

Goshen, 344, Cape May.

Hand, John Holmes—Eclec. Coll. of Philadelphia, Pa., '70; (1 1880).

Ocean City, 1,307, Cape May.

Burt, N. Howard—Pa.1,'95; (1 1895); 809 Wesley Ave.

Fortiner, Geo. R.—H—Pa.9,'87; (1 1886).

Griscom, Isaac Norwood—H—Pa.9,'04; (1 1904).

Hutchinson, Thos. C.—H—Pa.9,'78; (1 1889).

Miller, Elijah—Pa.1,'86; (1 1889).

Waggoner, John S. (b 1837)—Pa.1,'60; (1 1881); 731 Asbury Ave.; until 10, 3-9.

Sea Isle City, 340, Cape May.

Wells, Wm. Hughes—Pa.2,'91; (1 1900).

Wildwood, 150, Cape May.

Dunning, Thos. S.—Pa.9,'02; (1 †).

Harker, Gordon—Oak and Pacific Aves.

Wilson, Stacy M.—Pa.1,'69; (1 †).

H. homeopath; E. eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Bridgeton, 13,913, Cumberland.

Kirchoff, Wm. F.—Md.4,'98; (1 1900).

Streets, D. R.

Streets, Jacob G. (b 1845)—Pa.6,'66; (1 1880).

Wainwright, Fredk. P.—Pa.11,'01; (1 1901).

Carmel, 400, Cumberland.

Segal, Julius—Pa.2,'04; (1 1905).

Deerfield Street, 175, Cumberland.

Cooper, Herbert L.—Vt.2,'96; (1 1898).

Dividing Creek, 791, Cumberland.

Hill, Chas. T.—Pa.3,'81; (1 1881).

Fairton, 401, Cumberland.**Greenwich, 1,000, Cumberland.**

Glasgow, Thomas (b 1878)—Md. 4,'02; (1 1902); 8-9, 1-3, 6-8.

Heislerville, 347, Cumberland.

Butcher, Joseph—Pa.2,'83; (1 1883).

Mauricetown, 579, Cumberland.

Spence, Geo. S. (b 1880)—Pa.2,'05; (1 1905).

Millville, 12,000, Cumberland.

Bennett, Samuel D.—Pa.2,'96; (1 1896); 118 E. Pine St.

Franckle, C. S.—Md.3,'00; (1 1900); 425 High St. Kirk, Irwin W.—Md.3,'88; (1 1889).

Neal, C. B. (b 1866)—Pa.1,'90; (1 1890); 200 N. Third St.; until 9, 12:30-2:30.

Ware, Francis V. (b 1873)—H—Pa.9,'96; (1 1896); 223 N. 2d St.; until 9, 1-3, 7-9.

Port Elizabeth, 488, Cumberland.

Wiletts, J. Howard—Pa.2,'58; (1 1880).

Port Norris, 997, Cumberland.

Bacon, Stetson L.—Pa.2,'58; (1 1880).

Shiloh, 270, Cumberland.

Cunningham, Wm. H.—Pa.11,'04; (1 1904).

Vineland, 4,370, Cumberland.

Beck, J. L.

Buck, R. E.

Cunningham, Geo.; (b 1863)—Pa.2,'97; (1 1897); 612 Landis Ave.

Faulkner, Morris R. (b 1872)—H—Pa.9,'95; (1 1895); 6th and Elmer Sts.; 10-12, 6-8.

Fellows, R. P.

Foot, Theo. (b 1848)—H—N.Y.9,'74; (1 1880); 636 Wood St.; until 9, 1-4, 6-8.

Grey, Chas. M. (b 1879)—Ill.11,'04; (1 1904).

Halsey, John S. (b 1869)—N.Y.1,'92; (1 1893); 645 Wood St.; 2-4, 7-8.

Jones, Claude P. (b 1870)—Mass.1,'93; (1 1905); 10 N. 6th St.; 7-8, 1-3, 7-8.

Mullin, Wm. P. (b 1859)—Pa.9,'81.

Patterson, Louise—Ill.19,'99; (1 1904).

Sawyer, Waldo F. (b 1865)—Pa.2,'90; (1 1890); 109 S. 7th St.; 2-5.

Winslow, J. H.—Pa.2,'01; (1 1903).

H. homeopath; E. eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Bloomfield, 9,668, Essex.

Broughton, Wm. R.—N.Y.1,'90; (1 1890); 15 Church St.; 5-8.

Gile, Frank A. (b 1845)—H—N.Y.9,'75; (1 1880); 47 Broad St.; 8-9, -3, 7-8.

Pitt, Jesse B.—H—N.Y.9,'70; (1 1880); 207 Broad.

Post, Walter (b 1877)—H—N.Y.9,'99; (1 1899); 35 Park Pl.; 8-9, 1:30-2:30, 7-8.

Ringland, Robt. F.—N.Y.1,'03; (1 1905); 76 Washington Ave.

VanGieson, Wm. H.—Md.3,'86; (1 1886); 395 Franklin St.

Wells, Franklin C.—N.Y.10,'81; 179 Belleville Ave.

Wolfe, Jacob S.—Md. 3,'90; 44 Watsessing Ave.

Caldwell, 1,367, Essex.

Bond, Edwin E. (b 1871)—N.Y.10,'92; (1 1892); 8-9, 1-2, 6:30-7:30.

Gardner, David M. (b 1871)—Mass.5,'00; (1 1902); Bloomfield and Ryerson Ave.

Laine, Edmund R.—N.Y.9,'68; (1 1880).

East Orange, 21,506, Essex.

Banks, Chas. W.—N.Y.10,'90; (1 1902).

Banks, Winifred D.—N.Y.20,'99; (1 1899).

Boyer, Arthur A.—N.Y.1,'87; 54 Harrison St.

Burnet, Harriet K.—N.Y.11,'86; 15 Arlington Ave.; 11-2:30, 7-8.

Cooke, William Harvey (b 1865)—Mass.5,'88; (1 1892); 10 N. Munn Ave.; until 9:30, 2-3, 7-8.

Dodd, Sam'l W.—60 Carleton St.

Garrett, Wilton D.—N.Y.5,'85; (1 1886); 473 Main St.

Giveans, Bradford W. (b 1868)—H—N.Y.9,'93; (1 1893); 10 N. Grove St.; 8-10, 2-4, 6-8.

Gould, Elizabeth J. T.—N.Y.14,'73; 78 Carlton St.

- Granger, William R. (b 1860)—Vt.2,'89; (l 1906); 48 Main St.; 8-9, 1-3, 7-9.
- Groves, Chas. Austin (b 1850)—N.Y.9,'81; (l 1887); 303 Main St.; until 9, 2-3, 7-8.
- Hinds, Harriet C.—N.Y.13,'77; (l 1880).
- Jochith, Walter A. (b 1874)—Ont.5,'98; (l 1898); 277 N. 20th St.; office, Broad St.; 9-4.
- Mason, Stephen C.—Ill.1,'05; 51 Hawthorne Ave.
- Quivey, Wm. L.—Ill.1,'84; (l 1900); 4 Prospect St.
- Riggins, Edwin N.—225 Midland Ave.
- Stout, Henry V. S. (b 1855)—H—Pa.9,'93; (l 1901); 94 William St.; 8-10, 1-3, 6-8.
- Thompson, Arthur F. (b 1875)—H—N.Y.9,'98; (l 1901); 169 Main St.; 8-10, 2-3, 7-8.
- Glenridge, 1960, Essex.**
- Harris, H. Crittenden—Pa.1,'83; (l 1888).
- Irrington, 5255, Essex.**
- Bruce, Ida Norris (b 1858)—H—N.Y.14,'86; 1156 Springfield Ave.; 8-9, 1-2, 6-7.
- Christian, M. Osborne—Mass.1,'78; (l 1880).
- Maplewood, 431, Essex.**
- Taylor, Geo. Herbert (b 1882)—H—N.Y.9,'04; (l 1905); (Roosevelt Park); 8-9:30, 1-2, 7-8.
- Montclair, 16,000, Essex.**
- Burnett, Hayes Jos. (b 1877)—D.C.3,'04; (l 1904) 25 Orange Rd.; 8:30-10, 2-4, 6:30-9.
- Dodd, Saml. W.—N.Y.1,'05; (l 1905); Samuel St.
- Foster, Herbert W. (b 1869)—H—N.Y.9,'91; (l 1892); 10 The Crescent; 8-9, 1:30-3:30, 7-8.
- Hanan, James T. (b 1876)—N.Y.1,'99; (l 1903).
- Judson, A. R.—Pa.2,'85; (l 1885); 29 Union St.
- Krichbaum, Phillip E. (b 1870)—Ill.15,'96; (l 1899); 35 S. Fullerton Ave.; 8-9, -1, 6-8.
- Krichbaum, Theodora W.—Ill.15,'96; (l †); 35 S. Fullerton Ave.
- Love, L. C. (b 1873)—N.Y.1,'00; (l 1900); 50 S. Fullerton Ave.; office, 16 Church St.
- Mabe, J. Corwin (b 1873)—N.Y.1,'05; (l 1905); 29 Midland Ave.
- Shelton, Chas. Henry (b 1854)—H—N.Y.9,'80; (l 1880); 70 Grove St.; until 9:30, after 1:30; after 6:30.
- Wilson, Wm. W.—H—Pa.9,'05; 72 Valley Rd; 8-10, 1-3, 6-8.
- Wensch, Alexander E.—Md.9,'01; (l 1901); 51 Portland Pl.
- Newark, 246,070, Essex.**
- Anderson, Henry J.—N.Y.9,'75; (l 1880); 579 Broad St.
- Andrews, H. B.—* (l 1881); 73A 8th Ave.
- Andrews, Wm. J.—O.1,'65; (l 1880); 4 W. Park St.
- Ayers, J. S.—N.Y.9,'83; (l 1884); 21 Avon Ave.
- Bachman, Charles—N.Y.13,'86; (l 1886); 72 S. Orange Ave.
- Bachman, William—N.Y.13,'96; (l 1896); 342 S. 6th St.
- Baker, Walter S.—N.Y.9,'63; 250 Mulberry St.
- Baldwin, Edw. H.—N.Y.9,'95; (l 1896); 77 Clinton Ave.
- Baldwin, Theo. H.—N.Y.9,'75; (l 1880); 86 Washington Ave.
- Ballentine, Allen D. (b 1862)—H—Pa.2,'86; 95 Halsey St.; 9-11, 6-8.
- Barber, Edw. H.—H—N.Y.9,'77; (l 1880); 154 Clinton Ave.
- Barber, Pliny W. (b 1854)—Ky.5,'75; (l 1886); 169 Mt. Prospect Ave.; 9-11, 2-4.
- Beggs, Wm. F. (b 1865)—Pa.2,'93; (l 1893); 17 Fulton St.; 8:30-1.
- Bellino, Pasquale—Univ. of Naples, Italy, '98; (l 1905); 219 8th Ave.
- Berardinelli, Carming G.—Univ. of Naples, Italy, '01; 143 8th Ave.
- Blair, Jas. Allen—N.Y.2,'93; (l 1898).
- Blank, Louis N.—Md.4,'04; (l 1904); 74 S. 8th.
- Bradin, Edw. Del.—Pa.1,'77; 679 Broad St.
- Bridgen, Geo. B.—* 795 Ridge St.
- Bruck, Max (b 1873)—Md.3,'02; (l 1902); 347 Washington St.; office, 367 Washington St.; 9-9.
- Burnett, Jas B.—N.Y.5,'66; 16 Chestnut St.
- Carpenter, Frank S.—Ill.4,'94; (l 1896); 3d Ave. and Broad St.
- Caruso, Francesco A.—Univ. of Naples, Italy, '02; (l 1903); 69 Garside St.
- Cella, Francisco—Univ. of Naples, Italy, '95; (l 1903); 240 Hunterdon St.
- Chapman, Robt. W.—N.Y.1,'91; (l 1891); 250 Bloomfield Ave.
- Charbonneau, Eugene G. (b 1878)—Mich.7,'01; (l 1902); 32 South St.
- Church, Charles H. (b 1866)—H—N.Y.9,'91; (l 1892); 22 E. Kinney St.; 9-10, 2-4, 7-8.
- Clark, Augustus M. (b 1836)—N.Y.1,'58; (l 1880); 812 Highland Ave.
- Coghlan, Jasper W. (b. 1876)—H—N.Y.9,'00; (l 1900); 29 Chestnut St.; until 10, 1-3, 6-7:30.
- Conkling, Edw. D. G.—H—N.Y.9,'90; (l 1890); 224 Belleville Ave.; until 9:30, 2-3:30, 6-7:30.
- Connelly, Frank J. (b 1870)—N.Y.10,'92; (l 1892); 537 Ferry St.; 9-10, 2-3, 7-9.
- Constantinides, Chas. L.—Ont.2,'03; (l 1904); 186 Belleville Ave.
- Courtwright, Everett P.—Pa.2,'90; (l 1890); 11 Centre St.
- Crane, Matthias S. (b 1844)—O.3,'78; (l 1884); 43 Elizabeth Ave.; 8-5.
- Cummins, Jas. H.—N.Y.10,'90; (l 1890); 413 Clinton Ave.
- Cunningham, Joseph A. (b 1875)—N.Y.1,'01; (l 1903); 591 Warren St.
- D'Amico, Antonio—Univ. of Naples, Italy, '97; (l 1901); 31 Richmond St.
- Danzis, Maximillian—N.Y.10,'99; (l 1899); 46 Mercer St.
- Davies, Geo. W.—Md.4,'05; (l 1906); 119 N. 6th St.
- Davidson, Louis L. (b 1880)—Vt.2,'02; (l 1902); 172 Spruce; 8-10, 1-3, 6-8.
- DeLong, Arthur D.—N.Y.5,'88; (l 1888).
- Dennis, Helen (b 1874)—N.Y.20,'00; (l 1902); 30 Central Ave.; 10:30-12, 7-8.
- Dennis, Laban (b 1840)—N.Y.1,'66; (l 1880); 30 Central Ave.; 8-10, 2-3, 7-8.
- Di Matteo, Francis R.—Md.4,'03; (l 1903); 17 Grove St.
- Donnelly, R. J.—Md.4,'97; (l 1898); 313½ Academy St.
- Dunker, Fredk. W.—N.Y.10,'66; (l 1880); 492 Washington St.; office, 15 Court St.; until 10, 2-4, 7-8.
- Edwards, P. H.—N.Y.10,'95; (l 1900); 144 Warren St.
- EGge, Julius—N.Y.5,'90; (l 1890); 429 Washington St.
- Elliott, Daniel—N.Y.1,'80; (l 1880); 84 Washington St.
- England, Chas. W.—* 117 Mechanic St.
- Falley, Etta—N.Y.7,'03.
- Federmay, Phil. H.—Ill.17,'02.
- Feldman, Jacob—Brisky Med. Coll., Russia, '74; (l 1889); 582 Market St.
- Ferris, Sanford J.—Conn.1,'97; (l 1899).
- FitzGerald, Paul (b 1868)—N.Y.1,'94; (l 1894); 214 N. 7th St.
- Fitzpatrick, Edw. F.—Md.4,'03; (l 1904); 601 Warren St.
- Frazer, Samuel H. (b 1842)—E—N.Y.13,'70; Frederick, Gustav H.—349 Camden St. (l 1880); 17-19 W. Park St.; 10-4.

- Frey, Albert (b 1863)—N.Y.1,'88; 331 S. Orange Ave.; 2-3:30, 7-8.
- Friess, Frederick (b 1848)—H—N.Y.9,'75; (1 1880); 19 Elm; 7-9, 1-3, 7-9.
- Froelich, J. C.—Tenn.11,'01; (1 1902); 12 Somerset St.
- Gabriel, Chas. J.—N.Y.1,'01; (1 1901); 379 Morris Ave.
- Gillen, Robt. F.—N.Y.5,'79; (1 1880); 36 Clinton
- Giuliana, R. A.—N.Y.8,'98; (1 1898); 269 High St.
- Glatzmayer, Herman A.—N.Y.8,'95; (1 1895); 129 Wickliffe St.
- Gordon, Francis S.—N.Y.5,'98; (1 1899); 271 Clifton Ave.
- Graves, Anna M. (b 1852)—N.Y.11,'73; (1 1880); 121 Mt. Prospect Ave.; 3-5.
- Greenberg, Saml. (b 1880)—N.Y.10,'04; (1 1904); 158 Court St.; 9-10, 1-3, 6-8.
- Hagerty, Leidy S.—Tenn.11,'01; (1 1902); 23 Burnett St.
- Hahn, Albert J. (b 1852)—N.H.1,'85; (1 1887); 383 Morris Ave.
- Hahn, George H.—N.Y.1,'02; (1 1903); 326 Springfield St.; 8-9, 7-8.
- Hailperin, Clement J. (b 1882)—N.Y.19,'04; (1 1904); 194 Spruce St.; 8-10, 1-3, 6-8.
- Harden, Albert S.—Md.1,'01; (1 1902); 7 Humboldt St.
- Harman, Geo. W.—Pa.9,'84; (1 1895); 900 Broad St.
- Haux, Hans M. (b 1863)—N.Y.1,'86; (1 1887); 393 Springfield Ave.; until 9:30, 1-3, 6-8.
- Heath, Louanna (b 1880)—Pa.7,'03; (1 1904); 534 Warren St.; 8-10, 1-3, 7-8.
- Hendry, Hugh C.—N.Y.10,'72; (1 1880); 60 Hal-leck St.
- Hexamer, Fred (b 1866)—N.Y.5,'78; (1 1890); 118 Wickliffe St.; 1-3, 7-8.
- Hirschberg, Samuel—N.Y.10,'05; (1 1905).
- Hitchcock, Wm. E.—Conn.1,'66; (1 1869); 55 Belleville Ave.; 7-9, 1-3, 6-8.
- Hoffman, Gustav P.—N.Y.5,'94; (1 1895); 277 Littleton Ave.; 8-9, 1-3, 7-8.
- Holden, Edgar—N.Y.1,'61; (1 1880); 13 Central Ave.
- Hopper, Thos. B.—N.Y.10,'91; (1 1891); 57 Webster St.
- Houston, John C.—N.Y.5,'94; (1 1894); 325 Washington St.
- Johnson, Wm. M.—Mich.1,'81; (1 1881); 1 Richmond St.
- Judson, Wm. A.—Vt.2,'89; (1 1890); 255 Clifton Ave.
- Kessler, Henry B.—N.Y.8,'05; (1 1905); 14½ Norfolk St.
- Klein, Ignaz—Md.3,'05; (1 1905); 471 Springfield Ave.
- Kraemer, Chas. F.—N.Y.1,'90; (1 1890); 269 Mt. Prospect Ave.
- Kraker, David A.—N.Y.10,'98; Md.6,'02; (1 1902); 15 Burnett St.
- Krause, Henry G. (b 1856)—Kaiser Wilhelm Univ., Germany,'79; (1 1888); 317 S. Orange St.; 8-9, 2-3:30, 7-8.
- Lauterwasser, Charles—* 252 Littleton Ave.
- Lehmacker, Francis—Univ. of Griefswald, Germany,'64; (1 1880); 164-6 Springfield Ave.
- Lippe, C.—Ga.1,'97; (1 1899); 250 Littleton Ave.
- Loughman, Andrew J. (b 1873)—Md.3,'01; (1 1901); 136 Bowery; 1-3, 7-9.
- Lowy, Otto—Va.4,'02; (1 1902); 62 Beacon.
- Lyon, Ernest M.—N.Y.10,'77; (1 1880); 282 Broad St.
- McCabe, Thomas S.—Md.3,'02; (1 1902); 234 Lafayette St.
- McCartie, Danl. B.—N.Y.10,'91; (1 1894); 170 Belleville Ave.
- McGlennon, Wm. Bernard—Md.1,'05; (1 1905); 310 Central Ave.
- Malatesta, Jos. M. (b 1859)—Pa.2,'86; 178 Mt. Prospect Ave.; 8-10, 5-9.
- Mandeville, Chas. D.—N.H.1,'87; (1 1888); 410 Mulberry St.
- Mandeville, Fredk. A.—N.Y.9,'88; (1 1888); 940 Broad St.
- Mandeville, Fredk. B.—N.Y.9,'63; (1 1880); 940 Broad St.
- Martin, Noah R.—* 85 Halsey St.
- Martland, Harrison S.—N.Y.1,'05; (1 1905); 1138 Broad St.
- Masullo, Antonio—Univ. of Naples, Italy,'66; 19 Deft St.
- Matturri, Nicholas M.—Univ. of Naples, Italy, '92; (1 1902).
- Mautner, Emil—Md.3,'03; (1 1903); 257 Fairmount Ave.
- Meeker, Frank B.—Md.4,'99; (1 1899); 63 First St.
- Meyer, Franklin L.—N.Y.10,'87; (1 1887); 18 Warren Ave.
- Miller, Henry A.—* 288 Plane St.
- Monroe, Frances H. (b 1862)—H—N.Y.9,'86; 530 Orange St.; 8-9:30, 1:30-3, 7-8.
- Morgan, Edw. B.—N.Y.8,'81; (1 1890); 10 Hill St.
- Morrison, Caldwell (b 1866)—H—N.Y.9,'98; (1 1889); 399 7th Ave.; 8-9:30, 2-3, 7-8.
- Motzenbecker, Peter F. (b 1873)—N.Y.5,'96; (1 1896); 680 High St.; 2-4, 7-8.
- Mulcahy, D. D.—N.Y.1,'72; (1 1880); 77 Bank.
- Mulholland, John K.—Ill.4,'78; (1 1885); 27 Court St.
- Munroe, Francis H. (b 1862) H—N.Y.9,'86; (1 1897); 530 Orange St.; 8-9:30, 1:30-3, 7-8.
- Mutter, Alfred A. (b 1883)—Ky.2,'05; (1 1905); 425 S. 10th St.; until 10, 1-3, 6-8.
- Nash, Wm. G.—N.Y.1,'03; (1 1904); 40 New.
- Nydes, John—N.Y.5,'98.
- O'Crowley, C. R.—N.Y.1,'04; (1 1905); 12 Lombardy St.
- O'Gorman, George—N.Y.4,'81; 986 Broad St.
- O'Reilly, Myles—L.R.C.P.I.'79; (1 1895); 143 Washington St.
- O'Reilly, Patrick M.—Md.4,'02; (1 1902); 290 S. 7th St.
- Ost, Henry—N.Y.10,'94; (1 1894); 477 Springfield Ave.
- Palmer, E. Howard—* (1 1906).
- Potter, Geo. E.—O.2,'80; (1 1889); 87 Halsey St.
- Rachlin, Israel J.—N.Y.10,'03; (1 1903); 1 Hill-side Ave.
- Ripley, Chas. D.—N.Y.1,'89; (1 1889); 84 Johnson Ave.
- Rosenwasser, Chas. A. (b 1874)—N.Y.1,'94; (1 1903); 214 S. 6th St.; 8-10, 1-3, 6-8.
- Roth, Oswald H.—N.Y.10,'92; (1 1892); 210 Littleton Ave.
- Scaly, Edward—N.Y.10,'84; (1 1884); 369 Washington St.
- Schaaf, E. O.—N.Y.10,'94; (1 1894); 217 S. Orange Ave.
- Schilling, W.—* (1 1880); 585 Springfield Ave.
- Sidner, Alvah V.—* 19 Webster Pl.
- Sleght, Bevier H. B.—H—Pa.9,'82; (1 1884); 31 Lincoln Park; 8-8:30, 2-4, 6-8.
- Smalley, Sara D. (b 1875) H—N.Y.11,'00; (1 1900); 224 Broad St.; 11-2:30, 7-8.
- Smith, E. Fayette—N.Y.1,'76; (1 1880); 9 Fulton St.
- Smith, Lawrence F.—N.Y.19,'99; 32 Chambers.
- Somerhof, Jos. F.—N.Y.10,'94; (1 1894); 146 William St.

- Steel, Wm. H.—* 16 E. Park St.
- Stockton, Frank O. (b 1859)—N.Y.1,'81; (1 1892); (77 Harrison St., East Orange); office, 22 Central Ave.; 9-5.
- Sutphen, Jos. S. (b 1839)—N.Y.1,'65; 267 Orange St.; until 10, 12-2.
- Sweeney, Daniel—Ia.1,'79; (1 1882); 353 Summer Ave.
- Tirico, Antonio—Univ. of Naples, Italy,'00; (1 1905); 24 E. Mechanic St.
- Tommasi, C. F.—* 110 Elm St.
- Twitchell, Adelbert B., Jr. (b 1869)—H—Pa.9,'98; (1 1900); 224 S. 7th St.; until 10, 2-3, 7-8.
- Wantsch, Joseph—Mich.7,'04; (1 1905); 66 Springfield Ave.
- Ward, Aaron C.—N.Y.1,'86; (1 1886); 325 Clinton Ave.; 9-4.
- Ward, Alice H.—N.Y.14,'90; (1 1890); 16 James St.
- Ward, Leslie D.—N.Y.1,'68; (1 1880); 1058 Broad St.
- Ward, Wm. R. (b 1870)—Pa.9,'93; (1 1893); 113 Prospect Ave.; 8-9.
- Weeks, Grenville M.—N.Y.5,'61; 900 DeGraw Ave.
- Weiss, Lazare—Univ. of Bucharest, Roumania,'99; (1 1904); 104 West St.
- Wendel, Augustin V.—Md.3,'88; (1 1880); 205 Littleton Ave.
- Wendelboe, Lars T. (b 1867)—Md.4,'95; (1 1899); 516 Springfield Ave.; 8-9, 1-3, 7-8.
- Westervelt, Marvin Z.—N.Y.9,'01; (1 1901); 625 Ridge St.
- Whitenack, M. Royal—N.Y.10,'00; (1 1901); 19 Bathgate Place.
- Widman, Albert V.—N.Y.1,'87; (1 1890); 611 Clinton Ave.
- Widmer, H. R.—N.Y.1,'03; (1 1904); 44 Ferry.
- Wilder, Alexander (b 1823)—E—N. Y. 15,'81; (1 1881); 5 N. 11th St.
- Wilkes, Arthur C. (b 1880)—H—N.Y.9,'03; (1 1905); (Irvington); office, 995 Clinton Ave.; 8-9, 1-2, 7-8.
- Wilson, Jas. W. (b 1869)—N.Y.10,'97; (1 1897); 149 Union St.; 1-3, 7-9.
- Wintsch, Carl Herman (b 1871)—H—N.Y.9,'95; (1 1895); 188 Fairmont Ave. 9-12, 6-8.
- Wolfe, W. W.—N.Y.8,'96; (1 1897); 383 Mulberry St.
- Wolfs, Jean F.—N.Y.8,'05; (1 1905); 216 Clifton Ave.
- Woodruff, Franklin C.—N.Y.9,'87; (1 †); 201 Summer Ave.
- Woolf, Bernhardt H. (b 1874)—Mass.6,'04; (1 1904); 48 Hillside Pl.; 8-10, 2-4, 6-8.
- Woolman, Henry M.—Mich.1,'90; (1 1890); 54 13th Ave.
- Yadkowsky, Emanuel—N.Y.10,'03; (1 1903); 50 Charlton St.
- Young, Jas. John L.—Md.3,'03; (1 1903); 178 Washington Ave.
- Nutley, 3,000, Essex.**
- Jackson, Albert F.—N.Y.1,'05; (1 1905).
- Langdon, Roy—N.Y.1,'96; N.Y.8,'01; (1 1902).
- VanRiper, Abram H.—N.Y.1,'78.
- Orange, 21,141, Essex.**
- Bunn, Frank C. (b 1868)—H—N.Y.9,'89; (1 1891); 22 Hillyer St.; 8:30-10.
- Dowling, C. E. (b 1869)—Pa.2,'96; (1 1897); 169 Day St.; until 9, 1-2, 7-8.
- Gerbert, Herman P.—N.Y.1,'83; (1 1883).
- Harrison, Albert J.—*
- Luongo, Fred—Univ. of Naples, Italy, '01; (1 1903).
- Moffat, Edgar Y. (b 1856)—H—N.Y.9,'79; (1 1890); 476 Main St.; 8-9:30, 2-3.
- Richards, Geo. Herbert (b 1863)—H—N.Y.9,'85; (1 1888); 11 Cleveland St.; 8-9, 2-3, 6:30-7:30.
- Rogers, Harry (b 1877)—H—N.Y.9,'99; (1 1900); 58 Reynolds Terrace; office, 462 Main St.; 9-11, 5-6:30.
- Seward, John L. (b 1844)—Pa.1,'67; (1 1869); 416 Main St.; until 9:30, 2-3, 7-8.
- Spottiswoode, Sarah C.—N.Y.11,'86; (1 1886).
- Tetreault, F. J. E. (b 1860)—Que.5,'80; (1 1881); cor. Main and Centre Sts.
- Thomas, Wm. Harvey—Pa.1,'94; (1 1903).
- Wakely, Wm. A.—N.Y.9,'88; (1 1891).
- Weller, Arthur (b 1870)—H—Ill.4,'03; (1 1903); 473 Main St.; 8-9, 1-3, 7-8.
- West, Eugene G.—Pa.9,'84; (1 †).
- South Orange, 4,608, Essex.**
- Heberton, Wm. W.—N.Y.9,'85; (1 1885).
- Morris, Watson B. (b 1878)—N.Y.19,'02; (1 1905); 163 S. Orange Ave.; office, 117 Irvington Ave.
- Pulsford, Henry A.—N.Y.1,'91; (1 1891).
- Upper Montclair, 2,000, Essex.**
- Harrison, Wm. Nelson (b 1873)—N.Y.1,'95 (1 1905); 76 Oakwood Ave.; 8-9, 11-12, 7-8.
- Krichbaum, Jas. W. (b 1862)—H—Ill.4,'91; (1 1906); 207 Bellevue Ave.; until 10, 2-3, 6-8.
- Meeker, Irving Avarad (b 1873)—N.Y.9,'98; (1 1899); 581 Valley Rd.; 9-10, 1-2, 7-8.
- Vailsburgh, 2,779, Essex (East Orange P. O.).**
- Satterer, William (b 1875)—Pa.9,'03; (1 1903); 238 S. Orange Ave.; until 10, 1-3, 6-8.
- West Orange, 6,889, Essex.**
- Morehouse, Jas. Thomasson (b 1857)—N.Y.5,'93; (1 1893); Freeman and Cross Sts.; 8-9, 1-3, 7-9.
- H. homeopath; E. eclectic; P-M. physio-medic;
* information regarding graduation not obtained;
(Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (†) licensed but date not given.
- Clarksboro, 150, Gloucester.**
- Haines, Chas. T.—Pa.9,'98; (1 1898).
- Clayton, 1,951, Gloucester.**
- Porch, Albert—Pa.2,'67; (1 1880).
- Glassboro, 2,000, Gloucester.**
- Heritage, John Down—Pa.1,'61; (1 1880).
- Iszard, Howard (b 1856)—H—Pa.9,'86; (1 1887); 13 State St.; 7-9, 1-2:30, 6-8.
- Malaga, 332, Gloucester.**
- Smith, Asa A. (b 1838)—Pa.1,'64; (1 1880).
- Mantua, Gloucester.**
- Osborn.
- Mullica Hill, 446, Gloucester.**
- Ashcraft, John H.—Pa.2,'55; (1 1882).
- Carr, Henry H.—Pa.9,'85; (1 1885).
- Newfield, 450, Gloucester.**
- Buck, Ralph E.—Ill.1,'94; (1 1894); (Vineland).
- Paulsboro, 1,717, Gloucester.**
- Black, Allan Brown—Pa.9,'96; (1 1896).
- Pounds, Wm. H.—H—Pa.9,'86; (1 1886); 1 E. Broad St.; 8-10, 7-9.
- Reeves, Robt. H.—Pa.2,'83; (1 1883).
- Pitman Grove, 215, Gloucester.**
- Slaughter, Louis N. (b 1862)—H—Ill.4,'88; 5 Broadway; 7-9, 1-3, 6-8.
- Swedesboro, 1,183, Gloucester.**
- Buzby, Benj. F.—Pa.1,'77; (1 1880).
- De Grofft, Vernon E.—Pa.11; (1 1899).
- Grimshaw, Oliver—H—Pa.9,'90; (1 1890).
- Westville, 250, Gloucester.**
- Williamstown, Gloucester.**
- McClure, James C.—D.C.2,'99; (1 1900).
- Woodbury, 4,807, Gloucester.**
- Campbell, Duncan—Pa.9,'95; (1 1896); 130 S. Broad St.

Clark, Henry H. (b 1868)—Pa.1,'91; (1 1891); 87 S. Broad St.
 Parker, Thos. E. (b 1854)—H—Pa.9,'80; (1 1889); 170 S. Broad St.; until 9, 1-3, 7-8.
 Underwood, J. H.

H. homeopath; E. eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1+) licensed but date not given.

Arlington, 4,784, Hudson.

Doremus, Widmer E. (b 1878)—H—N.Y.9,'01; (1 1903); 106 Midland Ave.; 8-9:30, 6-7:30.

Bayonne, 41,000, Hudson.

Axford, W. Homer (b 1874)—Pa.1,'00; (1 1901); 711 Ave. C; 8-9, 1-3, 6-8.

Connelly, John T. (b 1873)—Ill.13,'98; (1 1898); 276 Ave. C.

Cook, John (b 1873)—Md.4,'02; (1 1902); 38 E. 22d St.

Davey, Thos N., (b 1867)—Ont.3,'00; (1 1900); 10 E. 34th St.; 8-9, 1-2, 7-8.

Larkey, Charles J. (b 1882)—N.Y.19,'04; (1 1904); 44 W. 22d St.; 8-9, 1-3, 6-8.

Myers, Saml. I. (b 1852) H—N.Y.1,'77; Avenue C and 33d St.; 7-9, 1-2, 7-8.

Osius, Moise (b 1874)—Univ. of Din Josi, Roumania, '99; (1 1905); 30 E. 22d St.

Sanborn, J. Lane (b 1863)—N.Y.5,'85; (1 1885).

Smith, J. Stucky (b 1846)—N.Y.8,'98; (1 1900); 765 Avenue C.

Thum, Ernest (b 1879)—N.Y.10,'00; (1 1905); 623 Avenue D.

Harrison, 12,824, Hudson (Newark P. O.).

Goudy, E. Stanley (b 1868)—Pa.11,'98; (1 1898); 405 Davis Ave.; until 10, 1-3, 7-9.

Pringle, John (b 1846)—Univ. of Glasgow,'75; (1 1887); E. Newark St.; 8-9, 1-2, 7-9.

Roth, Harry E. Jr.—N.Y.1,'01.

Hoboken, 65,000, Hudson.

Atwell, D. R.—H—N.Y.9,'85; (1 1885); 629 Washington St.

Ball, Chas. H.—Md.4,'00; (1 1901); 1010 Garden st.; 8-9, 1-2, 6-8.

Broesser, Henry V.—H—N.Y.9,'90; (1 1902); 716 Washington St.; 1-3, 7-8.

Brokhaus, Marie H.—N.Y.11,'89; (1 1889); 500 Hudson St.; 8-10, 5-7.

Clausen, Bernard (b 1864)H—N.Y.9,'88; (1 1889); 736 Garden St.; 8-9, 1-2, 6-7.

Clute, Russell—N.Y.3,'03; (1 1904); 707 Park Ave.; 8-9, 1-2, 6-8.

Drasel, Gustav W. (b 1865)—O.11,'90; (1 1890); 91 Jefferson St.; 8-10, 1-2, 7-9.

Geyer, Victor—Univ. of Freiburg, Germany, '78; (1 1888); 423 Garden St.

Grew, Francis B.—Univ. of Edinburgh,'75; (1 1888); 614 Garden St.; 8-9, 1-2, 7-8.

Lewis, Livingstone L. (b 1877)—N.Y.5,'98; (1 1900); 712 Washington St.; 8-9, 1-2, 6-7:30.

Lindenbaum, Henry (b 1877)—N.Y.19,'02; (1 1903); 235 Garden St.; 8-10, 1-2, 6-8.

Natrass, Robert B.—H—N.Y.9,'05; (1 1905); 706 Garden St.; 8-9, 1-2, 6-7.

Nichols, G. Louis—H—N.Y.9,'93; (1 1893); 721 Washington St.; 8-9, 1-2, 6:30-7:30.

Peterson, Chas. A.—N.Y.9,'97; (1 1897); 336 Garden St.; 8-9, 1:30-3, 6:30-8.

Pooch, Jos. T.—Md.4,'90; (1 1890); 816 Bloomfield St.

Rudolph, John J. (b 1876)—Md.6,'98; (1 1901); 606 Garden St.; 8-9, 1-2, 7-8:30.

Simon, Chas. I.—N.Y.1,'79; (1 1884); 722 Washington St.; 7-9, 12-2, 6-8.

Stack, Jos. F. X.—N.Y.10,'96; (1 1897); 212 Garden St.; 8-9, 1-2, 7-8.

Zenneck, Julius F. (b 1874)—N.Y.5,'98; (1 1898); 204 11th St.; 8-10, 1-2:30, 6:30-8:30.

Hudson Heights, 300, Hudson.

Hellstern, Ephraim C. (b 1879)—Md.4,'04; (1 1904); Palisade Plaza; 8-10, 2-3, 7-8.

Kothe, Otto—N.Y. 19,'99; (1 1899).

Jersey City, 206,433, Hudson.

Adams, Henry F.—Ont.5,'69; 322 Webster Ave.

Adams, Clovis—N.Y.1,'77; (1 1884); 53 South St.

Adams, Saml.—H—N.Y.9,'01; (1 1901); 2812 Hudson Blvd.

Adler, Jos.—N.Y.10,'99; (1 1903); 215 Sip Ave.

Andrews, B. A.—N.Y.10,'69; Summit and Mercer Sts.

Baketel, H. Sheridan (b 1872)—N.H.1,'95; 123 Gifford Ave.; office, 57 Laight St., N. Y.; 10-4.

Bance, Mary Edith—N.Y.11,'90; (1 1890).

Bidwell, Horace G.—N.Y.10,'72; 82 Madison Ave.

Bondy, S. E.—Univ. of Prague, Austria,'77; (1 1889); 168 Danforth Ave.

Bowen, Horace—H—N.Y.9,'89; (1 1889); Boulevard and Sip Ave.

Bowley, Helen F. L.—O.7,'96.

Boyd, Frank R.—N.Y.19,'02; 125 Maple St.

Cannon, Geo. E. (b 1869)—N.Y.9,'00; (1 1900); 441 Pacific Ave.; 8-10, 1-2, 7-8.

Case, Chas. H.—N.Y.1,'69; 118 Oak St.

Coe, Fredk. O.—Md.4,'80; 681 Bergen Ave.

Connell, John—H—N.Y.9,'89; (1 1889); 87A Bowers St.

Costello, Daniel F.—* 195 Hopkins Ave.

Craven, Jos. J.—N.Y.1,'88; (1 †); 306 Varick St.

Culver, John W.—N.Y.5,'95; (1 1896); 76 Congress St.

Dodd, Wm. J.—N.Y.10,'76; 101 Grand St.

Doherty, John W.—Vt.1,'87; (1 1887); 272 Barrow St.

Downs, R. H.—Pa.1,'89; 324 3d St.

Drayton, Henry S.—E—N.Y.13,'89; 37 Emory St.

Drossner, Morris—Univ. of Greifswald, Germany, '63; (1 †); 566 Bergen Ave.

Durrie, Wm. A.—H—N.Y.9,'78; 306 Academy St.; office, 664 Jersey Ave.

Feury, N. Fredk. (b 1874)—Tenn.5,'98; (1 1898); 4 Madison Ave.; 7-8.

Finnerty, John H.—N.Y.10,'84; (1 1884); 217 8th St.

Fletcher, Zachary P. (b 1862)—H—N.Y.9,'88; (1 1891); 23 Cottage St.; 9-10, 6-8.

Gardner, J. W.—N.Y.10,'96; (1 1896); 636 Ocean Ave.

Ghee, Peter F.—N.C.3,'98; (1 1898); 286 5th St.

Gold, Bertha B.—N.Y.14,'97; 598 Pavonia Ave.

Haase, H. W.—N.Y.19,'81; 240 Warren St.

Hespe, H. Chas.—* 390 Central Ave.

Hinchman, Melissa C.—N.Y.13,'78; 364 Bergen Ave.

Hoffman, Jas.—H—Pa.9,'85; (1 1885); 461 Jersey Ave.

Hollister, Saml. A.—H—O.26,'86; (1 1887); 108 Danforth Ave.

Holloway, John Morgan—H—N.Y.9,'93; (1 1895); 539 Summit Ave.; 8:30-9:30, 2-3, 7-8.

Hommell, Philemon E.—N.Y.10,'93; (1 1893); 571 Bergen Ave.

Hornblower, T.—N.Y.5,'60; 322 Central Ave.

Hornblower, Theo. R.—N.Y.1,'71; 631 Bergen Ave.

Jardine, M. A.—H—*; 84 Sip Ave.

Kammerer, A. Chas.—N.Y.5,'75; (1 1887); 1148 Summit Ave.

Klein, A. Katherine—H—N.Y.11,'99; (1 1899); 172 Bowers St.

Koonz, P. F.—* 38 Gifford Pl.

- Kopetschny, Edw. F.—N.Y.10,'86; (1 1886); 591 Jersey Ave.
- Kopetschny, Ottocar E.—N.Y.5,'86; (1 1886); 591 Jersey Ave.
- Langdon, R. M.—N.Y.8,'98; (1 1900); 146 Sip Ave.
- Lemmerz, Theo. H. (b 1870)—H—N.Y.9,'96; (1 1897); 167 Magnolia Ave.; 8-9, 1:30-2:30, 7-8.
- Leonard, Edward, Jr. (b 1871)—Mass.1,'98; (1 1898); 123 Gifford Ave.; office, 42-46 Germania Ave.
- Lewis, Wm. C.—Pa.1,'80; (1 1880); 207 Pacific Ave.
- Lignot, Albert—N.Y.5,'76; 269 Garfield Ave.
- Lignot, Wm. C.—N.Y.10,'76; 808 Garfield Ave.
- Livingston, W. S.—O.26,'69; 111 Harrison Ave.
- Lochner, John—N.Y.10,'71; 583 Jersey Ave.
- Lockwood, H. L.—H—N.Y.9,'79; 301 Montgomery St.
- Loomis, Albert J.—N.Y.10,'84; (1 1884); 280 Montgomery St.
- Lutkins, Wm. C.—N.Y.5,'76; 276 Montgomery St.
- McKinney, Wm. G.—Pa.1,'94; (1 1897); 72 Romaine Ave.
- Macmillan, John W. (b 1863)—H—N.Y.9,'86; (1 1886); 313 Webster Ave.; 8-9, 1-2, 6-8.
- MacMurrough, F. K.—* 101 Lafayette St.
- Martine, Jennie W.—N.Y.11,'01; 201 Palisade Ave.
- Matthel, Edw.—Md.4,'96; (1 1897); 86 Bowers St.
- Mendelsohn, Lewis—Md.4,'01; (1 1901); 222 York St.
- Mersheimer, Christian H.—N.Y.9,'02; (1 1902); H—258 Palisade Ave.
- Moss, Lola—* 345A Ogden Ave.
- Muttart, Alder C.—N.Y. 5, '87; (1 1887); 798 Grand St.
- Nevin, Jos. L. (b 1853) H—N.Y.9,'78; 158 Bowers St.; until 9, 2-3, 7-8.
- O'Gorman, Michael W.—* 38 Erie St.
- Ohlmeier, Marie E. Schroeder—N.Y.11,'92; (1 1892); 383 Webster Ave.
- Opdyke, Chas. P.—H—N.Y.9,'95; (1 1889); 101 Ocean Ave.
- Opdyke, Levings A.—H—N.Y.9,* (1 1885); 55 Clinton Ave.
- Palmer, Ella—Pa.7,'98; (1 1899); 15 Madison Ave.
- Pendergast, Edw. J.—N.Y.10,'06; (1 1896); 47 Cottage St.
- Putnam, Chas. E.—H—N.Y.9,'86; (1 1886); 64 Sip Ave.
- Pyle, Wm. L.—Pa.1,'87; (1 1887); 400 Bergen Ave.
- Renwick, Andrew G.—N.Y.5,'90; (1 1890); 36 Boyd Ave.
- Robertson, Fred C.—N.Y.5,'94; (1 1894); 792 Grand St.
- Rosenstein, Jacob L. (b 1880)—Md.3,'05; (1 1905) 125 Wayne St.
- Russi, Oscar Jas.—Pa.1,'01; (1 1902); 221 Pavonia Ave.
- Schwarz, S. W.—* 334 7th St.
- Selnow, F. C.—Univ. Gottingen, '71; Summit Ave.
- Sherwood, Henry D.—N.Y.5,'82; (1 1882); 579 Summit Ave.
- Simmons, H. R.—H—N.Y.9,'77; 557 Bramhall Ave.
- Simpson, Maxwell G.—Pa.1,'84; (1 1888); 16 Exchange Pl.
- Sisler, John W.—* 53 Orient Ave.
- Smith, Henry V. A.—N.Y.1,'00; (1 1901); 536 Summit Ave.
- Snyder, John Edw. C.—N.Y.5,'96; (1 1897); 331½ Webster Ave.—H.
- Spath, Geo. B. (b 1875)—Pa.11,'00; (1 1900); 300 Palisades Ave.
- Stout, Stephen V. W.—N.Y.1,'68; 995 Summit Ave.
- Straughn, Fredk.—Md.1,'70; (1 1881); 9 Astor Pl.
- Street, Daniel B. (b 1875)—D.C.1,'97; (1 1902); 449 Ocean Ave.
- Ullman, S. E.—N.Y.3,'80; 98 Broadway.
- Valentine, Edwin Jas. G.—H—N.Y.9,'94; (1 1894); 15 Cottage St.
- Wells, E. S.—* 111 Summit Ave.
- Wersebe, Fredk. Wm.—N.Y.5,'98; (1 1900); 25 Reed St.
- West, John E. (b 1843)—O.1,'67; (1 1889); 802 Ocean Ave.; until 9, 2-7.
- Wheeler, Jas. A. V.—*72; (1 †).
- Wilkinson, Geo.—N.Y.10,'82; (1 1883); 274 Bergen Ave.
- Wilkinson, Walter—N.Y.10,'89; (1 1889); 39 Harrison Ave.
- Williams, Thos. D. (b 1856)—Pa.1,'85; (1 1889); 53 Bright St.; office, 5 Montgomery St.
- Willis, Mary A. (b 1844) E—N.Y.13,'86; (1 1886); 3 Astor Pl.; 8-12, 7-9:30.
- Kearny, 10,896, Hudson (Arlington P. O.).**
- Clouse, Morris W.—N.Y.19,'09; (1 1905).
- Reid, John W.—Vt.2,'84; (1 1884); 1 Kearny Ave.; 8-9, 2-3, 7-8.
- Secaucus, 300, Hudson.**
- King, Geo. W.—Mich.1,'79; (1 1880); Hudson County Hospital.
- Rea, John Gordon (b 1880)—Md.4,'04; (1 1904).
- Town of Union, 16,872, Hudson (Weehawken PO)**
- Good, Geo.—N.Y.20,'01; (1 1902); 342 Bulls ferry Road.
- McCroskery, Jas. Harry (b 1880)—N.Y.1,'05; (1 1905); 4638 Hudson Blvd.; 10-12, 6-8.
- Menger, Wm.—N.Y.5,'97; (1 1898); 154 Hudson Blvd.; 8-10, 1-2, 6-8.
- Morano, Nicola—Univ. of Naples, Italy,'03; (1 1906); 524 Main St.
- Radus, Wm. F.—N.Y.5,'87; (1 1902); 4633 Hudson Blvd.
- Spalding, Henry J. (b 1876)—N.Y.20,'00; (1 1900); 533 Fulton St.; 7-9, 1-2, 6-8.
- Weisner, Emil—N.Y.8,'84; 209 Bergenline Ave.
- Weehawken, 8,028, Hudson.**
- Amende, Chas. Geo.—N.Y.10,'90; (1 1893).
- DeGroff, Ephraim—Pa.1,'63.
- Fendrich, Arthur E.—N.Y.1,'00; (1 1900); 74 Highwood Terrace.
- Luck, John T.—N.Y.1,'68; (1 1885); 409 Kossuth Ave., Union.
- Meissgeier, Edward B. (b 1869)—N.Y.10,'91; (1 1891); 149 Union St.; 10-10:45; 2-3, 7-8.
- Mesgeier, Wm.—N.Y.5,'97.
- Rabe, Rudolph F. (b 1872)—H—N.Y.9,'96; (1 1900); 56 Columbia Terrace; 2-3, 7-8.
- West Hoboken, 23,094, Hudson.**
- Allen, Isaac Lathrop (b 1882)—N.Y.8,'03; (1 1905) 590 Clinton Ave.
- Andi, Angelo—Univ. of Turin, Italy,'03; (1 1905); 221 Central Ave.
- Clark, Chas. C.—N.Y.9,'98; (1 1900).
- Darbois, Edmund O. (b 1883)—N.Y.20,'05; (1 1905); 526 High St.
- Denis, Louis A.—Pa.1,'94; (1 1895); 315 Stevens St.
- Draesel, Wm. A.—N.Y.5,'97; (1 1898); 246 Clinton Ave.
- Jahr, Richard—Univ. of Kiel, Germany, '91; (1 1898).
- Kuehne, Richard Jr.—N.Y.8,'04; (1 1904); 283 Summit Ave.; 8-9, 2-3, 7-8.
- Manuelian, Katchadoor Der (b 1870)—Pa.11,'03; (1 1905); 415 Highpoint Ave.
- Merten, Heinrich C.—Univ. of Berlin, Germany, '87; (1 1899).

Schmidt, D.—N.Y.1,'00.

Van Nuis, Chas. L.—Pa.11,'99; (1 1899); 315 Angeline St.

Wirtz, Louis Jos. (b 1881)—Md. 6,'04; (1 1905); 412 West St.; 8-10, 1-3, 7-8.

H. homeopath; E, eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Allendale, Hunterdon.

Berkaw, Willard E. (b 1856)—Pa.1,'81; (1 1881); 7-9, 6-9.

Baptistown, 117, Hunterdon.

Grim, Francis S.—Pa.2,'95; (1 1895).

Bloomsbury, 600, Hunterdon.

Lindabury, J. S.—N.Y.19,'62; (1 1867).

Reigel, Erasmus L.—Pa.2,'89; (1 1889).

Califon, 480, Hunterdon.

Miller, Theo.—N.Y.5,'73; (1 1881).

Topkins, Isidor—N.Y.8,'99; (1 1900).

Clinton, 816, Hunterdon.

Blackwell, Enoch.—Pa.11,'03; (1 1903).

Frace, John M.—Pa.1,'77.

Knight Wm.—Pa.1,'71; (1 1873).

Flemington, 2,162, Hunterdon.

Burd, Thos. B. J.—Pa.9,'74; (1 1880).

Grim, Francis S.—Pa.2,'95; (1 1895).

Schenck, William H.—N.Y.5,'48; (1 1849).

Frenchtown, 1,020, Hunterdon.

Decker, Frederick W. (b 1876)—Pa.2,'97; (1 1897).

Harman, Harry M. (b 1864)—Pa.2,'87; (1 1892); Bridge St.; 7-9, 1-3, 7-9.

Glen Gardner, 483, Hunterdon.

Hunt, Edgar T.—N.Y.10,'78.

Highbridge, 1,377, Hunterdon.

Alpaugh, Wm. C.—N.Y.10,'68; (1 1871).

Low, Fredk. Chas.—Pa.1,'94; (1 1896).

Rufe, John Johnson (b 1876)—Pa.2,'02; (1 1904); Main St.; 8-9:30, 1-3, 7-9.

Junction, Hunterdon.

Fulper, Theo. B. (b 1867)—Pa.2,'89.

Lambertville, 4,637, Hunterdon.

Fretz, John H.—Md.3,'85.

Larison, Frank W.—Md.3,'85; (1 1885).

Romine, George L. (b 1852)—Pa.1,'80; 9-12.

Salmon, Leon T.—Pa.1,'98; (1 1900).

Williams, Louis C.—Pa.2,'01; (1 1901).

Lebanon, 400, Hunterdon.

Miller, Henry H.—N.Y.5,'81; (1 1881).

Milford, 754, Hunterdon.

Chamberlin, John L.—Pa.11,'98; (1 1902).

Hell, A. Arling—Ja.11,'97; (1 1890).

Mount Pleasant, Hunterdon.

Carpenter, William R.

New Germantown, 252 Hunterdon.

Apgar, Francis A. (b 1851)—N.Y.10,'76; Main St.; 7-9.

Pattenburg, Hunterdon.

Allen, Edgar (b 1861)—Pa.2,'90; (1 †).

Quakertown, 239, Hunterdon.

Leaver, Morris H. (b 1872)—Pa.1,'02; (1 1902); 6-8, 12-1, 6-8.

Snyder, Quintus E.—N.Y.10,'68; (1 1881).

Ringoes, 302, Hunterdon.

Hart, A. M.—*

Larison, Cornelius W. (b 1837)—N.Y.15,'63; (1 1870); until 8, 12-2:30.

Whitehouse Station, 362, Hunterdon.

Clark, Dr.

Valley, Hunterdon.

Creveling, William S.—N.Y.5,'51; (1 1880).

H. homeopath; E, eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Allentown, Mercer.

Anderson, H. M.

Crosswicks, Mercer.

Brown, D. P.—H.

Hamilton Square, 400, Mercer.

Arthur, Francis M. (b 1875)—Md.4,'01; (1 1905); Main St.; until 8, 1-2, 6-8.

Robbins, Geo. R.—Pa.2,'70; (1 1889).

Hightstown, 1,749, Mercer.

Franklin, Chas. M.—N.Y.1,'74; (1 1880).

Geissinger, Saml. D.—Pa.2,'77.

Johnson, Jos. P.—* (1 1904).

McMillan, Wm. T. (b 1868)—Md.3,'88; (1 †); 7-9, 3-4.

Hopewell, 980, Mercer.

Miles, R. P.

Miller, John A.—Electric Med. Coll., Philadelphia, '64; (1 1880).

Van Neste, Geo. W.—Pa.2,'83; (1 1883).

Lawrenceville, 207, Mercer.

DeWitt, Edmund—N.Y.5,'62; (1 1880).

Pennington, 733, Mercer.

Hart, Edgar—Pa.1,'79; (1 1889).

Hart, Israel—Pa.1,'53; (1 1880).

Radeliffe, Wm. M.—Pa.2,'89; (1 1890).

Princeton, 3,899, Mercer.

Bergen, Elston H.—N.Y.1,'77; (1 1880).

Brown, B. B.

Carnochan, John M.—Pa.1,'00; (1 1902).

Kline, Andrew K.—N.Y.9,'88.

MacDonald, Arthur K.—Pa.1,'75; (1 1880).

Perkins, C. W.—H.

Wright, Howard E.—Pa.1,'93; (1 1893).

Titusville, 311, Mercer.

Turner, Irvine F. P.—Pa.2,'94; (1 1896).

Trenton, 73,307, Mercer.

Applegate, Ed. T. R.—St. Francis' Hospital.

Appleman, S. F.—H—585 W. State St.

Atkinson, Alvan W. (b 1869)—H—Pa.9,'93; (1 1893); 423 E. State St.; 8-9, 2-4, 7-8.

Belling, A. W.—H—"Aleda," Hanover St.

Bickstein, Albert R.—123 Jackson.

Boice, Harry B. (b 1858)—N.Y.5,'88; 922 Edge-wood Ave.

Bruere, Abel T.—Pa.2,'86; (1 1888); 203 Spring St.

Cooper, Jas. R.—Pa.2,'86; (1 1886); 225 Hamilton Ave.

Cornell, A. V. H.—H—334 W. State St.

Dewey, J. H.—Pa.1,'78; 78 N. Clinton Ave.

Dorety, Philip J.—Pa.11,'98; (1 1898); 777 E. State St.

Fell, Alton S.—Pa.9,'94; (1 1894); 312 E. State St.

Finney, Wm. F.—Pa.1,'84; 229 N. Warren St.

Friedman, A.—McKinley Hospital.

Glick, Wm. H.—Pa.2,'05; St. Francis Hospital.

Grabowski, Carimer E. (b 1844)—Univ. of Cra-cow, Austria, '68; (1 1894); 245 Adeline St.; Until 9, 1-3, 6-8.

Grier, Sarah M.—521 E. State.

Griffith, Wm. H. G.—Pa.9,'72; (1 1882); 217 Ham-ilton Ave.

Hall, Wm. J. (b 1872)—Pa.2,'96; (1 1896); 438 E. State St.; 2-4, 6-8.

Higgins, Jas. F.—Pa.11,'02; (1 1902); 398 S. War-ren St.

Hollingshead, Emily—O.11,'75; (1 †); 57 South-ard St.

Ivins, Howard—Pa.9,'99; (1 1899); 307 E. State St.

Johnston, Frank—Md.3,'83; (1 †); 505 S. Warren St.
 Kelly, Edward Lang—C. G.—15 Wilkinson Pl.
 Kent, Morton M.—Pa.11,'01; (1 1901); 222 N. Warren St.
 Loos, Isaac B.—Pa.2,'88; (1 1890); 310 E. State St.
 McCullough, John H.—Pa.9,'92; (1 1892); 213 Perry St.
 McCullough, Wm. G.—Pa.9,'78; (1 1880); Hanover and Montgomery Sts.
 Macfarland, Burr W. (b 1867)—Pa.2,'88; (1 1889) 584 W. State St.; office, 9 E. State St.; 9-5.
 McIlwaine, Chas. H.—Pa.1,'77; 40 W. State.
 McKinney, William G. (b 1868)—Pa.1,'94; (1 1897); 609 Stuyvesant Ave.; office, 72 S. Clinton; 9-11, 3-4.
 Mac Mullen, John W.—* (1 1906).
 Niedermeier, A. F.—330 N. Clinton.
 Paslan, W. S.—203 E. State St.
 Phillips, Robert H. C. (b 1865)—Pa.2,'96; (1 1896) 232 E. State St.; 1-2, 7-8.
 Rogers, Wm. T.—Pa.9,'85; (1 1886); 225 Perry.
 Scammell, Frank George—Pa.11,'99; (1 1899); 413 E. State St.
 Schmoyer, Herbert—Pa.1,'04; Emergency Hospital.
 Skellenger, Edw. B.—N.Y.1,'75; (1 1880); 264 Hamilton Ave.
 Slack, Clarence—Pa.11,'05; (1 1906); Mercer Hospital.
 Taylor, Walter A. (b 1880)—Pa.2,'04; (1 1904); 328 Bellevue Ave.; 8-9, 1-3, 7-8.
 Tompkins, Lucius D. (b 1856)—Pa.1,'77; 124 N. Warren St.; 7-9, 12-2, 7-9.
 Van Duyn, Wm. B.—N.Y.5,'66; (1 1880); 133 Perry St.
 Witte, Eugene B.—N.Y.9,'85; (1 1886); 425 E. State St.
 Woodhouse, Alfred—Pa.9,'04; (1 1905); 837 W. State St.
 Worthington, Anthony H.—Pa.9,'60; (1 1880); 110 W. State St.
 Wyckoff, W. W.—Eclectic Med. Coll., Philadelphia, '64; (1 1880); 12 N. Warren St.

Trenton Junction, 300, Mercer.

Allen, Enos B.—O.26,'99; (1 1901).
 Allen, Wm. Cline—Pa.2,'96; (1 1897).
Windsor, 274, Mercer.
 Silver, Geo. A.—N.Y.5,'81; (1 1882).

H. homeopath; E. eclectic; P-M, physio-medic;
 * information regarding graduation not obtained;
 (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Cranbury, 752, Middlesex.

Whitaker, Jonathan I. (b 1833)—Pa.4,'57; (1 1890); 8-10, 1-2, 5-7.

Carteret, Middlesex.

Reason, John J.—Md.1,'99; (1 1899).

Dunellen, 1,239, Middlesex.

Brakeley, Peter W.—Pa.1,'69.

Franklin Park, 300, Middlesex.

TenEyck, John D.—Md.3,'95; (1 1895).

Jamesburg, 1,063, Middlesex.

Shinn, J. C.—Pa.6,'99; (1 1899).

Zandt, Henry D. (b 1847)—Pa.1,'61; (1 1880); until 8, 12-1:30, 6-8.

Metuchen, 1,786, Middlesex.

Freeman, C. M. (b 1859)—N.Y.1,'84; (1 1884).

Monmouth Junction, 213, Middlesex.

Whitman, Walter S.—* (1 †).

New Brunswick, 20,006, Middlesex.

Applegate, Grover T.—H—Ill.4,'83; (1 1884); 5 Livingston Ave.

Cronk, Edwin I.—Pa.9,'00; (1 1900); Monument Sq.

Dudley, G. S.—H.

Long, Saml. (b 1851)—H—Pa.9,'73; (1 1880); 22 Livingston Ave.; 8-10, 2-3, 7-9.

Maas, Chas. T.—N.Y.5,'86; (1 1889); 22 French St.

Meacham, Thos. V.—N.Y.10,'91; (1 1893); 88 Bayard St.

Van Marter, John S.—Pa.4,'66; (1 1880).

Newmarket, 382, Middlesex.

Nelson, Wm. J.—N.Y.1,'80; (1 1880).

Whitford, Myron J.—Ill.10,'83; (1 1887).

Old Bridge, 300, Middlesex.

Crandall, I. Carlton—N.Y.5,'96; (1 1897).

Perth Amboy, 25,895, Middlesex.

Blackwell, Lewis S. (b 1833)—Pa.1,'57; (1 1880); 218 High St.

Hults, Eugene A. (b 1861)—H—Pa.9,'86; 220 High St.; 8-10, 1-3, 6-8.

Manning, Anna—N.Y.14,'93; (1 1896); 422 State St.; 8-10, 2-4, 7-8.

Silverstein, William R. (b 1880)—Md.4,'03; (1 1903).

Stafford, Jacob—N.Y.1,'86; (1 1888).

Sayreville, 1,000, Middlesex.

Beekman, Jesse H.—Ill.4,'88.

South Amboy, 6,349, Middlesex.

Burnett, Chas. B.—* (1 1892).

Meacham, Eugene A.—N.Y.5,'98; (1 1898).

White, J. Leon.—Pa.2,'81; (1 1881).

South River, 2,792, Middlesex.

Bissett, Fredk. W.—N.Y.1,'76; (1 1880).

Burnett, Chas. B.—Pa.9,'93; (1 1893).

Selover, Sarah E. E.—N.Y.14,'93.

Spotswood, 478, Middlesex.

Dennelsbeck, Jos. G. (b 1856)—Vt.2,'91; Main St. 6-7, 12-1, 6-8.

Woodbridge, 2,000, Middlesex.

Doyle, Lawrence D.—N.Y.8,'04; (1 1904).

Voorhees, Florence M.—N.Y.14,'01; (1 1903).

H. homeopath; E. eclectic; P-M, physio-medic;
 * information regarding graduation not obtained;
 (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Allenhurst, 165, Monmouth.

Bennett, Henry H. (b 1857)—N.Y.1,'81; (1 1882); Euclid Ave.; 8-10, 1-3, 6-7.

Allentown, 695, Monmouth.

Anderson, Harry Miller—Pa.1,'98; (1 1898).

Johnson, H. P.—Pa.2,'83; (1 †).

Ackerman, Jas. F.—H—N.Y.9,'90; (1 18992).

Ackerman, Jos. Herbert—H—Pa.9,'99; (1 1899).

Ackerman, Jos. Herbert—Pa.9,'99; (1 1899).

Bryan, Jos. H. (b 1865)—H—N.Y.9,'90; (1 1893); 221 Asbury Ave.; 10-12, 2-3, 7-8.

Coleman, Fredk. F.—N.Y.5,'93; (1 1893).

Davison, John F. (b 1859)—N.Y.5,'81; (1 †); 605 Asbury Ave.

Hetrick, Llewellyn E.—Pa.9,'98; (1 1898).

Kinmouth, Hugh S.—N.Y.1,'70; (1 †).

Kurtz, Waldo—Ont.3,'96; (1 1896).

Reed, Edwin B.—Pa.2,'84; (1 †).

Rose, John Turner—Md.4,'94; (1 1894).

Upham, Ella Prentiss (b 1850)—H—Pa.7,'85; (1 †); 305 3d Ave.; 9-11, 1-2:30; 6-7:30.

Williamson, Alexander—Pa.1,'78; (1 1880).

Atlantic Highlands, 1,383, Monmouth.

Fay, Geo. DeWitt (b 1858)—H—Pa.9,'81; (1 †); 23 Bay View Ave.; 1-2, 6:30-8.

- VanMarter, John H.—Pa.1,'80; (1 †).
Belford, 210, Monmouth.
 Budlong, O. Wadsworth—D.C.2,'80; (1 1887).
Belmar, 902, Monmouth.
 Kinmouth, W. L.—N.Y.16,'81 (1 †).
 Snow, Harry E.—Ill.1,'87; (1 1899).
 Treat, Clerihew R. (b 1874)—N.Y.20,'99; (1 1900);
 until 9, 12-2, 7-8.
Bradley Beach, 982, Monmouth.
Creamridge, 123, Monmouth.
 Shaffer, Geo. W.—* (1 †).
 Bradner, Wesley K.—N.Y.10,'75; (1 1887).
Freehold, 2,934, Monmouth.
 Breslin, James—Pa.1,'02; (1 1905); Mechanic and
 Jackson Sts.
 Neafie, Harry—N.Y.10,'80.
 Stilwell, Jesse—Md.3,'05; (1 1906).
Keyport, 3,413, Monmouth.
 Cooley, Herbert S.—N.Y.1,'97; (1 1901).
Lake Como, 300, Monmouth.
 Williams, Frank H.—Pa.1,'74; (1 1880).
Little Silver, 389, Monmouth.
 VanFleet, Walter—Pa.9,'80.
Longbranch, 13,000, Monmouth.
 Chasey, James (b 1854)—N.Y.1,'75; (1 1883);
 Broadway.
 Clark, Orrin Arthur (b 1868)—Md.4,'94; (1 1897);
 429 Broadway; office, 8-9, 1-2, 7-8:30.
 Green, Jas. O. (b 1840)—N.Y.10,'66; (1 1881);
 Bath Ave.
 Hughes, Henry (b 1848)—N.Y.1,'73; (1 1880);
 Broadway.
 Hetrick, Llewellyn E.—H—Pa.9,'98; (1 1898).
 Pemberton, Harry H. (b 1852) (H—Pa.9,'72;
 (1 1880); 3d Ave.
 Reed, Walter S. (b 1864)—N.Y.19,'00; (1 1900);
 Atlantic Ave.
 Slocum, Wm. H. (b 1868)—Pa.1,'92; (1 1893);
 245 Broadway; until 10, 2-4, 6-8.
Manasquam, 1,500, Monmouth.
 Herbert, R. W.—N.Y.9,'81; (1 1881).
 Higgins, Archibald S.—N.Y.10,'92; (1 1895).
 Norris, Clarence A.—Pa.2,'01; (1 1901).
 Wainwright, James B.—N.Y.1,'77; (1 1880).
Marlboro, 300, Monmouth.
 Daves, Ely J.—Pa.2,'83; (1 1880).
Matawan, 1,511, Monmouth.
 Ervin, Nathan—N.Y.10,'97; (1 1898).
 Straughn, Clinton C. (b 1872)—H—Pa.9,'96;
 (1 1896); 8-9, 1-2-30; 7-8.
Middletown, 267, Monmouth.
 Taylor, Edw. F.—Pa.1,'53; (1 1880).
Navesink, 567, Monmouth.
 Andrews, Russell G.—N.Y.3,'66; (1 1884).
Ocean Grove, 2,754, Monmouth.
 Alday, Henry B.—H—Pa.1,'82; (1 1880).
 Currie, Margaret C.—H—N.Y.16,'81; (1 1881).
 Disbrow, Stephen A.—Md.3,'81; (1 1884).
 Phelps, Flora M.—Mich.1,'01; (1 1901); 43 Pil-
 grim Pathway; 10-12, 2-4.
 Wright, Laura M. (b 1840)—H—N.Y.16,'82;
 (1 †); 101 Heck Ave.; until 10, 1-2, 5-7.
Red Bank, 5,428, Monmouth.
 Garrison, Biddle Hiles (b 1877)—H—Pa.9,'98;
 (1 1898); 23 Monmouth St.; 7-9, 1-3, 6-8.
 Sayre, Jeremiah E.—Pa.2,'83; (1 1883).
 Young, Harvey W.—N.Y.5,'97; (1 1897).
Springlake Beach, 526, Monmouth.
 Trout, Wm. W. (b 1854)—Pa.2,'86; (1 †); Atlan-
 tic Ave.; until 10, 2-4.
West End, —, Monmouth.
 Frauenthal, Herman C.—N.Y.10,'97; (1 1900); El-
 beron Hotel.
 Offenbach, Robert—N.Y.18,'79; (1 1881).
- (Y. of P.) in practice before passage of present
 law, or licensed by virtue of a certain number of
 years of practice; figures in parentheses refer to
 dates of birth and state license; (1 †) licensed but
 date not given.
- Boonton, 3,901, Morris.**
 Woodruff, Marietta H. C.—H—N.Y.11,'74; (1 †);
 Washington St.; 7:30-9, 1-2, 6:30-8.
Butler, 300, Morris.
 Coates, George—N.Y.7,'88; (1 1888).
Chapelhill, 250, Monmouth.
 Patterson, Wm. F.—N.Y.3,'75; (1 †).
Chester, 713, Morris.
 Day, Harris (b 1867)—N.Y.5,'93; (1 1893); Main
 St.; until 9, 12-2, after 6.
 Green, Whitefield A.—Pa.2,'68.
Dover, 6,353, Morris.
 Bennett, Robt. A. (b 1844)—H—N.Y.9,'74; 34 Chest-
 nut St.
 Derry, Wm. E.—N.Y.1,'80; (1 1880).
 Hann, Peter S.—N.Y.9,'83; (1 1883).
 Miller, Fredk. W.—*
 O'Shea, Michael Francis—N.Y.10,'97; (1 1905).
Florham Park, 300, Morris.
 Snyder, Chas. F. (b 1858)—N.Y.9,'87; (1 1887);
 4 Park Ave.; 10:30-11:30, 3-5.
Gillette, 50, Morris.
 McGratte, Katharine (b 1878)—Pa.7,'02; (1 1902);
 Springfield Ave.; until 9, 1-2, 7-8.
Mendham, 500, Morris.
 Houston, John C.—N.Y.5,'94.
Morris Plains, 445, Morris.
 Fisher, E. Moore (b 1875)—Que.1,'04.
Morristown, 12,170, Morris.
 Allaben, Anna L.—H—N.Y.11,'94; (1 1895).
 Connett, Geo. C. (b 1865)—H—Ill.4,'91; (1 1891);
 87 South St.; 8-9, 2-4, 8-9.
 Loizeaux, Edw. S. (b 1877)—H—N.Y.1,'01;
 (1 1905).
 Mosier, Geo. W. (b 1858)—Pa.2,'86; 19 Western
 ern Ave.; 8-9, 6:30-7:30.
 Uebelacker, Armin—H—N.Y.9,'71; (1 †); South
 St.
 Willis, Geo. Stuart—H—N.Y.9,'99; (1 1899); 180
 South St.
 Wilson, Grace F.—H—N.Y.11,'99; (1 1901); 44
 Court St.
Mount Arlington, 300, Morris.
 Upchurch, Harvey C.—N.Y.1,'93; (1 1897).
Netcong, 941, Morris.
 Miller, John (b 1862)—N.Y.5,'86; (1 1887); Main
 St.
Newfoundland, 507, Morris.
 Drake, Daniel E. (b 1864)—Vt.2,'89; (1 1903);
 Idyl Ease Inn.
Pompton Plains, 119, Morris.
 Newcomb, Geo. W.—N.Y.1,'66.
 Van Romondt, Chas. D. (b 1847)—N.Y.1,'72; 8-9,
 1-2:30, 7-8.
Stephensburg, 125, Morris.
 Blackwell, Enos T.—Pa.1,'48; Vt.3,'69; (1 1882).
Succasunna, 411, Morris.
 Wolfe, Theo. F. (b 1847)—N.Y.1,'68; Main St.
- H. homeopath; E. eclectic; P-M, physio-medic;
 * information regarding graduation not obtained;
 (Y. of P.) in practice before passage of present
 law, or licensed by virtue of a certain number of
 years of practice; figures in parentheses refer to
 dates of birth and state license; (1 †) licensed but
 date not given.
- Barnegat, 1,019, Ocean.**
 Bunnell, Fred N. (b 1881)—Md.3,'05; (1 1905);
 Main St.; until 9, 12:30-2, 6:30-8:30.
Cassville, Ocean.
 Thompson, Otto C.—* (1 1906); R. F. D. No. 4.
Forked River, 400, Ocean.
 Blake, Duncan W., Jr.—Pa.2,'92; (1 1892).

Wallace, Gilbert E.—H—Pa.9,'96; (1 1897).

Lakewood, 2,800, Ocean.

Ball, F. S.—N.Y.5,'95.

Lawrence, C. L.—P.M. 5-7.

Palmer, C. A.—H.

Fechtig, St. George—P.M.—11:30-6.

Sparks, Lester H.—H—Pa.9,'04; (1 1904).

Stratford, Wm. H. (b 1878)—Ill.1,'03; (1 1905); 10-12, 5-7.

Manahawkin, 550, Ocean.

Hilliard, Joshua—Md.3,'01; (1 1901).

New Egypt, 900, Ocean.

Allen, Howard—Md.3,'89; (1 1889).

Bichler, Jacob Wm.—Pa.1,'98; (1 1899).

Morine, Michille A.—Pa.1,'97; (1 1898).

Woodward, Chas. P.—Md.6,'92; (1 †).

Point Pleasant, 746, Ocean.

Middleton, Willis Herbert (b 1860)—H—Pa.9,'82; (1 1899); Arnold Ave.; 7-10, 1-2, 5-7.

Tuckerton, 1,500, Ocean.

Conover, Charles H. (b 1874)—H—Pa.9,'99; (1 1899); until 9, 1-2:30, 6-8.

Lane, J. Lewis (b 1866)—Pa.2,'88; (1 1888).

Reeves, M. Williamson—Pa.2,'70.

H, homeopath; E, eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y, of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Clifton.

Melony, Lester F.—156 2nd St.

Haledon, 300, Passaic.

Lydecker, Abram A.—N.Y.5,'90; (1 1890).

Littlefalls, 1,500 Passaic.

McCormick, H. D.

Young, Warren H.

Smith, Wm. Randolph—* (1 1890).

Midvale, 60, Passaic.

Maines, Robt. G.

Shippee, David N.—N.Y.1,'94; (1 1894).

Newfoundland.

Drake, Daniel E.

Oak Ridge.

Coursen, Theodore D.

Passaic, 27,777, Passaic.

Armstrong, Robt. R.—N.Y.5,'95; (1 1895); Lexington Ave.

Badean, Chas. W.—54 Park Ave.

Baum, Soma—N.Y.5,'94; (1 1896); 150 2nd St.

Caverley, Fred S.—170 Passaic St.

Case, Mary V.—N.Y.14,'98; (1 1899); 120 Prospect St.

Chase, Wm. E. (b 1865)—N.Y.5,'89; (1 1894); 185 Main St.

Church, Chas. A. (b 1839)—H—N.Y.9,'71; (1 1880); 128 Prospect St.; until 9:30; 1-2, 6-7:30.

Corbin, L. Carroll (b 1861)—Md.4,'94; (1 1894); 198 Jefferson St.; until 9, 1-3, 6-8.

Datesman, Hiram F. (b 1851)—H—N.Y.9,'99; (1 1899); 87 Grove St.; office, 141 President St.; 9-11, 1-3, 7-8.

De Baun, Edwin (b 1860)—H—N.Y.9,'85; (1 1886); 34 Pennington Ave.; office, Pennington and Prospect Sts.; 2-4, 3-8.

Doolittle, Wm. H.—N.Y.5,'98; (1 1902); 109 Grove St.

Drews, Hugo—* (1 1895); 145 Lexington Ave.

Dwyer, Jos. W.—N.Y.1,'00; (1 1903); 332 Passaic St.

Fairchild, Paul H.—73 Pennington Ave.

Hadley, Jacob F.—291 Main Ave.

Hartinger, Kalman S. C.—Ill.22,'05; (1 1906); 184 2nd St.

Helfrich, Chas. H.—150 Passaic Ave.

Hegeman, John A.—200 Pennington Ave.

Joyce, Leo H.—259 Madison St.

Kunstlich, Alex.—Ind.8,'90; (1 1890); 123 2nd St.

Luck, Emil—174 Monroe St.

Machlin, Abraham—N.Y.10,'99; (1 1902); 72 2d St.

Norris, Chas. E.—61 Passaic Ave.

Oram, Jos. H.—Pa.2,'99; (1 1899); 95 Bloomfield Ave.

Pedrick, Alfred C. (b 1857)—H—Pa.9,'92; (1 1892)

153 Jefferson St.; 8-9, 12-3, 6-8.

Peters, Walter (b 1874)—N.Y.10,'05; (1 1905);

156 Passaic St.; until 9:30, 6:30-8.

Reynolds, Harry C.—N.Y.9,'99; (1 1900).

Ricardo, Norton C.—H—N.Y.9,'69; (1 1880); 53 Passaic Ave.

Schiffman, Samuel—148 Passaic St.

Silberstein, Samuel—Mass.5,'00; (1 1903).

Stagg, Frank M. (b 1874)—N.Y.1,'98; (1 1898);

190 Washington Pl.; 8-9, 1-3, 7-8:30.

Stemmerman, Wm. Henry (b 1869)—N.Y.5,'93;

(1 1893); 11 Elm St.; office, Main Ave. and Jefferson St.; 9:30-11; 2:30-4:30, 7-9.

Struble, Jas. H.—169 Prospect St.

Sullivan, Danl. W.—Vt.2,'96; (1 1897); 178 Washington Pl.

Tommasi, Carlo F.—389 Passaic St.

Van der Clock, Cornelius—N.Y.1,'00; (1 1902); 185 Jefferson St.

Van Schott, Gerard J.—D.C.2,'89; (1 †); 125 Lexington Ave.

Van Vranken, Gilbert D. (b 1866)—N.Y.5,'92;

(1 1896); 155 High St.; office, 20 Pennington Ave.; 1-3, 7-8.

Van Winkle, Leroy P. (b 1880)—N.Y.8,'03; (1 1905); 61 Bloomfield Ave.

Williams, Hiram—N.Y.5,'96; (1 1897).

Paterson, 105,171, Passaic.

Adlerman, Theo. D.—N.Y.1,'92; 251 Hamilton Ave.

Becker, Leo V.—81 Ward St.

Belcher, Herbert J. B.—14 Ward St.

Bedan, Edith—285 Summer St.

Bissett, John J.—N.Y.1,'92; (1 1892); 721 Broadway.

Borden, Davis P.—N.Y.13,'73; (1 1880); 386 Ellison St.

Bradsworth, John H.—N.Y.9,'81; (1 1881); 441 River St.

Carlough, David J. (b 1869)—N.Y.9,'95; (1 1897); 426 Ellison St.; until 9, 2-4, 7-8.

Carlough, Edna C. (b 1874)—N.Y.11,'01; (1 1901); 426 Ellison St.; 1-3, 7-8.

Carr, Ada (b 1852)—N.Y.11,'82; (1 1882); 125 Vreeland Ave.; 10-2.

Colacurci, Nicola—* (1 1902); 46 Smith St.

Crooks, Jas. (b 1861)—H—N.Y.9,'87; (1 1887); 241 Summer St.; office, 44 Church St.; 9-10, 2-3, 8-9.

Cummins, Mary G.—Ill.4,'93; (1 1896); 347 Van Houten St.

Denton, Peter—Pa.11,'04; (1 1904); 1060 Madison Ave.

Dittmer, Wm. C.—Univ. of Bonn, Germany, '48; (1 1885); 118 N. Main St.

Drury, Alfred (b 1872)—H—N.Y.9,'00; (1 1902); 122 Broadway; 10-11, 1-3, 7-8.

Ekins, Frank P.—N.Y.9,*; (1 1904); 25 Church St.

Emerson, Herbert S.—Md.3,'94; (1 1894); 94 Broadway.

Faulkner, Jas. N.—Ky.2,'75; (1 1890); 97 Park Ave.; 8-9, 12-2, 6-8.

George, Philip R.—N.Y.5,'97; (1 1898); 260 Park Ave.

Hagen, O. R.—160 Broadway.

Hempstead, Jacob—93 N. Main St.
 Hibshman, Walter S.—Norwood Bldg.
 Joelson, Morris S.—132 Paterson St.
 Kaucher, Howard L.—Pa.11,'00; (1 1903); 45 Totowa Ave.
 Keating Chas. A.—Pa.2,'02; (1 1903); 184 Ellison St.
 Kinne, Porter S. (b 1849)—H—N.Y.9,'72; (1 1881) 333 Van Houten St.; office, 171 Carroll St.; 9-10, 2-4, 7-8.
 Levine, Israel—Tex.4,'04; (1 1904); 197 River St.
 Mallon, Richard S.—N.Y.20,'95; (1 1905); 180 Broadway.
 Mandato, Ettore—Univ. of Naples, Italy, '99; (1 1900).
 Murn, Chas. J.—*; St. Joseph's Hospital, Market St.
 Neer, Frank Y.—95 Bridge.
 Newler, Abram—350 Belmont Ave.
 Newman, Arthur L.—Univ. of Vienna, Austria, '94; (1 1895); 147 Ellison St.
 O'Grady, T. F.—N.Y.10,'80; (1 1880); 374 Grand St.
 O'Shea, Jos. J.—N.Y.10,'96; (1 1895); 51 Paterson Ave.
 Paton, Thos. L. (b 1853)—Md.3,'87; (1 1888); 661 E. 24th St.; until 9, 1-3, 7-9.
 Ranscheinback, Paul E.—108 Broadway.
 Rea, John C.—81 Ward.
 Renosarl, V.—* 245 Market St.
 Russell, Chas. B. (b 1876)—Mass.1,'04; (1 1906); 16 Church St.
 Sabatino, Achille—37 Ellison St.
 Silberstein, Saml.—Md.6,'00; (1 1902); 141 Broadway.
 Solatinow, Jos.—N.Y.13,'82; (1 1882); 60 Paterson St.
 Strotz, Chas. M.—45 Jotowa Ave.
 Townsend, Saml. Cyrus (b 1853)—N.Y.10,'79; (1 1883); 113 Paterson St.; 8-9, 1:30-3, 6:30-8:30.
 Vreeland, Frank D.—N.Y.9,'79; (1 1881); 144 Carroll St.
 Walton, Gordon (b 1879)—N.Y.19,'04; (1 1905); 120 Washington St.
 Ward, Albert J.—N.Y.1,'04; (1 1904); 404 Totowa Ave.; 8-10, 1-3, 7-8:30.
 Was, Francois J. T.—Ill.11,'03; 60 E. 16th St.
 Was, John W. (b 1855)—Mich.1,'78; (1 1881); 50 Haledon Ave.; until 9, 2-4, 7-9.
 Wells, Stephen W.—N.Y.1,'96; (1 1902); 237 Broadway.
 Wiley, Sylvester W.—N.Y.10,'90; (1 1890); 17 Church St.
 Willard, Henry S. (b 1876)—H—N.Y.9,'96; (1 1898); 44 Church St.; 9-12, 7-8.
 Williams, Jos. W.—N.Y.1,'90; (1 1890); 646 E. 25th St.
 Wolfe, Aaron R.—N.Y.5,'82; (1 1882); 500 Union Ave.
Pompton Lakes, 847, Passaic.
 Colfax, Wm. S. (b 1865)—N.Y.1,'87; 8-9, 6:30-7:30
 Hawes, C. M.—Va.1,'00; (1 1902).
West Milford, 170, Passaic.
 Naines, R. J.—*.

H. homeopath; E. eclectic; P-M, physio-medic;
 * information regarding graduation not obtained;
 (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1+) licensed but date not given.

Alliance, 400, Salem.
 Kollman, Wm.—*

Palatine, 150, Salem.
 Atkinson, Chas. P.—Eclectic Med. Coll., Philadelphia,* (1 1882).
Pedricktown, 750, Salem.
 Black, Emanuel S. (b 1882)—Pa.9,'02; (1 1902).
Penn Grove, 1,826, Salem.
 Barnart, Newton H.—Pa.9,'88; (1 1889).
 Lummis, C. Percy—Pa.1,'01; (1 1901).
Salem, 6,443, Salem.
 Beckett, Albert T.—Pa.9,*; (1 1881); 105 W. Broadway.
 Jackson, Henry—* (1 1882); 83 Market St.
 Lippincott, Geo. C. (b 1850)—Pa.2,'75; 271 W. Broadway.
 Smith, Ellen B. (b 1866)—Pa.7,'92; (1 1892); 300 E. Broadway; 1-4, after 7.
 Smith, W. Scott—N.Y.8,'78; (1 1885); 300 E. Broadway.
 Wiley, David—Pa.1,'70; (1 1880); 137 W. Broadway.
Elmer, 1,140, Salem.
 Cheeseman, John P. (b 1851)—H—Pa.9,'79; (1 1880); 122 S. Main St.; 7-9, 1-3, 7-8.
 Conover, Jas. V. (b 1855)—E—O.2,'80; (1 1880); Front and Chestnut Sts.; 8-9, 1-3, 7-9.
 Rogers, Harry W.—Pa.11,'95; (1 1896).
 Woodruff, A. B.—Pa.1,'74; (1 1880).
Sharptown, 261, Salem.
 Newton, Chas.—Pa.9,'65; (1 1880).
Woodstown, 1,371, Salem.
 Allen, Lefferson A. D.—Pa.1,'67 (1 1883).
 McGeorge, Emerson—Pa.9,'94; (1 1894).
 Miller, Lewis H. (b 1868)—Pa.1,'95; (1 1895); until 9, 1-3, 6-8.
 Souder, Phillip G.—Pa.9,'75; (1 1880).
 Taylor, Sarah—Pa.7,'69.

H. homeopath; E. eclectic; P-M, physio-medic;
 * information regarding graduation not obtained;
 (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1+) licensed but date not given.

Basking Ridge, 450, Somerset.
 Jones, Fred C.—N.Y.1,'79; (1 1881).
 Pennington, William—N.Y.5,'86; (1 1887).
Bernardsville, 500, Somerset.
 Sutphen, Fredk. C.—N.Y.5,'88.
Boundbrook, 2,622, Somerset.
 Davis, Edwin T. (b 1859)—H—Pa.9,'82; (1 1886); Somerset St.; 8-9, 1-2, 7-8.
 McGill, Peter—Pa.1,'79; (1 1886).
 Robinson, John T.—H—Pa.9,'96; (1 1896).
East Millstone, 300, Somerset.
 Crouse, John—Pa.11,'93.
Far Hills, 200, Somerset.
 Fields, Frank L.—N.Y.5,'93; (1 1893); until 9, 1-2, 7-8.
Franklin Park.
 Ten Eyck, John D.—Md.3,'95; (1 1895).
Griggstown, 150, Somerset.
 Mosher, Abram B.—N.Y.5,'79; (1 1880).
Middlebush, 108, Somerset.
 Cooper, J. H. (b 1867)—Pa.11,'91; (1 1886).
Nashanic, 200, Somerset.
 Anderson, John E.—Md.3,'84; (1 1885).
Peapack, 241, Somerset.
 Farrow, Edwin F.—N.Y.1,'86.
 Keating, F. J.
Raritan, 3,244, Somerset.
 Cornell, J. B.
 Henry, Geo. A. (b 1876)—Pa.2,'00; (1 1900); 79 Somerset St.; 8-10, 1-3, 6:30-7:30.
 Nixon, Warford L.—Pa.2,'89; (1 1889).

Rocky Hill, 300, Somerset.

Reeve, Malvern (b 1865)—H—Pa.9,'99; (1 1899);
Washington St.; 7-9, 1-3, 7-9.

Skillman, 150, Somerset.

Jones, John B. (b 1878)—Pa.1,'00.

Somerville, 4,483, Somerset.

Lanning, Lewis M.—Ill.4,'92; (1 1892).

McConaughty, Francis (b 1863)—H—N.Y.9,'90.

Nixon, Warford L.—Pa.2,'89; (1 1889).

H, homeopath; E, eclectic; P-M, physio-medic;
* information regarding graduation not obtained;
(Y. of P.) in practice before passage of present
law, or licensed by virtue of a certain number of
years of practice; figures in parentheses refer to
dates of birth and state license; (1+) licensed but
date not given.

Andover, 415, Sussex.

Clark, Jephtha C. (b 1859) H—N.Y.9,'85; (1 1885);
until 8, 1-7.

Branchville, 526, Sussex.

Riddell, Herbert E. (b 1874)—Pa.9,'96; (1 1903);
until 9, 12-2, after 6.

Hamburg, 589, Sussex.

Uptegrove, Edw. P.—Pa.1,'99; (1 1901).

Lafayette, 438, Sussex.

Strader, John C.—N.Y.3,'71; (1 1880).

Stanhope, 682, Sussex.

Nelden, Harry H. (b 1870)—N.Y.10,'91; (1 1891);
Main St.; until 9, 12-1, after 6.

Newton, 4,376, Sussex.

Potter, Emerson B.—H—N.Y.9,'79; (1 1880).

Smith, Warren H.—H—Pa.9,'99; (1 1902).

H, homeopath; E, eclectic; P-M, physio-medic;
* information regarding graduation not obtained;
(Y. of P.) in practice before passage of present
law, or licensed by virtue of a certain number of
years of practice; figures in parentheses refer to
dates of birth and state license; (1+) licensed but
date not given.

Cranford, 508, Union.

Gilpin, Friend B.—Pa.1,'01; (1 1905).

Irwin, Fredk. C.—N.Y.9,'98; (1 1900).

McConnell, C. Wm.—Neb.1,'91; (1 1892).

Vail, Jas. L. (b 1873)—Pa.1,'98; (1 1898); 24
Holly St.; 8-10, 1-2, 6-8.

Elizabeth, 61,300, Union.

Bailey, Geo. W.—Pa.6,'62; (1 +); 1165 E. Jersey
Brown, Louis R.—Pa.6,'64; 23 W. Jersey St.;
(1 +).

Brown, Robt. S.—N.Y.9,'95; (1 1895); 287 N.
Broad St.

Buck, O. Alyah—* 20 Rahway Ave.

Burbeau, Josephine Ida—N.Y.9,'85; (1 +); 1411
E. Jersey St.

Childs, John—N.Y.1,'05; Elizabeth General Hos-
pital.

Crouthers, Anna J. (b 1852) H—N.Y.14,'82; (1 +);
1120 E. Jersey St.; 1:30-4, 6:30-9.

Hurley, J. Wm.—N.Y.7,'83; 36 3d St.

Keough, John—N.Y.1,'89; (1 +); 121 Livingston
St.

McElhinney, Dennis R.—Pa.1,'03; (1 1903); 626
Elizabeth Ave.

McElroy, Lee (b 1877)—Ill.6,'05; 925 Elizabeth
Ave.

Younglove, John (b 1836)—H—Mo.5,'61; (1 +);
407 Jefferson St.; until 9:30, 1-3, 7-8.

Fanwood, Union.

Westcott, Frank W. (b 1849)—Pa.2,'80; Park
Ave.

New Providence, 566, Union.

Cory, Abrahm M. (b 1828)—Pa.4,'57.

Plainfield, 24,094, Union.

Adams, Danl. C.—N.Y.9,'90; 46 Grove St.

Anderson, Jefferson C. (b 1867)—H—N.Y.9,'99;
(1 1899); 405 W. 4th St.; until 9, 1-3, 7-8.

Berg, Jos. F.—Pa.2,'62.

Brennan, Ambrose K.—Conn.1,'93; (1 1900); 317
Grant Ave.

Browning, W. Kempton—Pa.9,'97; (1 1897); 520
Park Ave.

Cooley, Justus H.—N.Y.13,'84; (1 1884); 122 Wes-
lemelave Ave.

Davis, Thos. S. (b 1852)—H—Pa.9,'84; (1 1884);
603 Park Ave.; 8-9, 1-3, 7-8.

Gesswein, Carl A. (b 1881)—Ill.11,'04; (1 1904);
182 E. Front St.; 8-10, 1-3, 7-8.

Keeny, Sarah D.—N.Y.14,'74; (1 +); W. 4th.

Lowrie, Henry H. (b 1841)—D.C.2,'63; 516 Park
Ave.; until 9, 1-3, 6-8.

Lufburrow, Charles B. (b 1872)—Md.4,'97;
(1 1897); 441 W. Front St.; 12-2, 6-8.

Rushmore, Edw. (b 1845)—H—Pa.2,'92; (1 +);
429 Park Ave.; 7-8:30, 1-3, 7-8.

Stillman, Martha Rose—N.Y.14,'96; (1 1898); 303
W. 4th St.

Stillman, Martha Rose—N.Y.14,'96; (1 1898); 303
7th St.

Tracy, Martha (b 1876)—Pa.7,'04; (1 1905); 440
W. 8th St.; office, 414 E. 26th St., N. Y.

Rahway, 7,935, Union.

Hough, H. Page—Pa.2,'78.

Holmes, Chas. B.—N.Y.9,'74; (1 +).

Randolph, Jno. M.—N.Y.5,'89.

Schroeder, Marie E. Ohlmeyer (b 1870)—N.Y.11,
'92; (1 1892); Stern St.

Steacling, Frank—N.Y.1,'00.

Roselle, 1,652, Union.

Brown, Frank H.—Pa.9,'02; (1 1904).

Strickland, Geo. W.—N.Y.8,'95; (1 1895).

Willoughby, Maxwell K. (b 1876)—Md.4,'01;
(1 1901); 14 E. Westfield Ave.; 8-9, 12-1, 7-8.

Summit, 6,806, Union.

Baker, Raymond D. (b 1878)—N.Y.19,'99;
(1 1902).

Burling, John—H—O.26,'75.

Lawrence, Wm. H.—N.Y.5,'77; (1 +).

Moister, R. W.—H—N.Y.9,'02; (1 1905); 30 Boule-
vard.

Westfield, 4,700, Union.

Cooper, Sherman—N.Y.7,'57.

Gale, Wm. (b 1832)—N.Y.8,'67; (1 1869).

Tubbs, Wm. Ray (b 1874)—H—Pa.6,'99; (1 1899);
20 Central Ave.; 8-10, 1-2, 7-8.

H, homeopath; E, eclectic; P-M, physio-medic;
* information regarding graduation not obtained;
(Y. of P.) in practice before passage of present
law, or licensed by virtue of a certain number of
years of practice; figures in parentheses refer to
dates of birth and state license; (1+) licensed but
date not given.

Alpha, 300, Warren.

Albright, Wm. H.—Pa.11,'99; (1 1899).

Borts, Isaac—N.Y.10,'74; (1 1880).

Belvidere, 1,784, Warren.

Lefferts, Franklin F. (b 1855) H—Pa.9,'78; (1 +).

Broadway, 210, Warren.

Creveling, Philip G.—Pa.3,'58; (1 +).

Hackettstown, 2,474, Warren.

Allen, Gertrude—N.Y.11,'90; (1 +).

Cline, Chas. H.—Pa.2,'81; (1 +).

Martin, Alden E.—Pa.9,'76; (1 +).

Woodruff, Robt. Hamilton—Pa.9,'99; (1 1901).

Harmony, 400, Warren.

Dewitt, Jas. D.—N.Y.5,'48; (1 +).

Hope, 165, Warren.

Rohrbach, Frederic—N.Y.10,'67; (1 +).

Phillipsburg, 10,052, Warren.

Barber, Thos.—Pa.1,'98; (1 1898); 468 S. Main.

Creveling, Chas.—N.Y.10,'87; (1 +); 463 S. Main
St.

Kline, William—Pa.1,'91; (1 1891); 118 S. Main.

Crispin, Saml. D.—Pa.2,'81; (1 +); 92 S. Main.

Pursel, Wm. Dana—Pa.1,'01; (1 †).

Shimer, Floyd A. (b 1880)—Pa.11,'05; (1 1905);

Lewis and Hudson Sts.; 7-9, 12:30-2:30, 6-8.

Stewart, Robt. A. (b 1851)—N.Y.5,'78; (1 †); 99 S. Main St.; 7-9, 5,7.

West, Heston R.—H—Ill.4,'84; (1 †); 109 S. Main St.

Port Murray, 291, Warren.

Funk, Harry S.—Pa.2,'78; (1 †).

Reigelsville.

Boyer, Charles H. (b 1869)—Pa.2,'94; (1 1894).

Stewartsville, 512, Warren.

Warrington, C. B.—Pa.1,'70; (1 1884).

Stillwater, 110, Sussex.

Landis, Edwin W.—N.Y.1,'00; (1 1900).

Washington, 3,580, Warren.

Bergen, Everitt J.—N.Y.5,'77; (1 †).

Hann, Laura W. Cook—Md.5,'92; (1 †); 18 W. Washington Ave.

McKinstry, Frank P. (b 1855)—H—Pa.9,'78; 28 W. Washington Ave.; 8-9, 1-3, 6-7:30.

Young, Geo. C. (b 1840)—Eclectic Med. Coll. of Philadelphia, Pa., '70; (1 1881); 34 E. Church St.; 8-10:30, 2-4, 6-8.

H, homeopath; E, eclectic; P-M, physio-medic; * information regarding graduation not obtained; (Y. of P.) in practice before passage of present law, or licensed by virtue of a certain number of years of practice; figures in parentheses refer to dates of birth and state license; (1 †) licensed but date not given.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 2.

ORANGE, N. J., AUGUST, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

THE LEGALITY OF STATE MEDICAL EXAMINATIONS AND RECIPROCITY IN INTERSTATE MEDICAL LICENSURE.*

By E. L. B. Godfrey, A. M., M. D.,
Camden, N. J.

The Legality of State Medical Examinations and Interstate Reciprocity in Medical Licensure have afforded occasion for such diverse comments in medical societies and medical journals, and the opinions expressed by physicians are so at variance one with another, that I venture to present these subjects for the consideration of this Society.

Prior to the institution of state examinations for medical licensure, the degree of Doctor of Medicine was conferred after two courses of lectures of five months each in two calendar years, and by some medical schools for a consideration, without attendance upon lectures. The registration of a copy of a medical diploma with the clerk of the county in which the holder resided was the only requisite for the legal practice of medicine in the several states.

In consequence of these decadent schools and frequent fraudulent registrations, the State of New Jersey, in 1890, instituted examinations through an official board as a prerequisite for license to practice medicine within its borders, irrespective of medical registration in another state and in addition to requiring the possession of a legitimate medical diploma. This action of the state was a return to the primary idea of state medical examinations which were first insti-

tuted in New Jersey during the Colonial period.

The subject of the legality of state medical examinations, especially in New Jersey, is herewith presented from two standpoints: First, the history of medical legislation in New Jersey, and, second, the right of a state to establish examination for licensure and to regulate medical practice within its jurisdiction under the authority of the Constitution of the United States, as interpreted by the United States Supreme Court.

MEDICAL LEGISLATION IN NEW JERSEY.

In 1772, New Jersey enacted a statute providing that all physicians desiring to practice medicine within its boundaries should be examined and licensed by the Supreme Court of the colony.¹ In 1784, when the state was founded, this statute was reenacted. In 1816, the state transferred the examination and the licensing of physicians from the Supreme Court to the Medical Society of New Jersey. In 1866, after a period of fifty years, this Society surrendered its authority to the state because of the special legislative enactments of 1851 and 1854. The former enactment exempted the graduates of five medical colleges² in New York and Philadelphia from examination and licensure by this Society, and the latter enactment granted all graduates of medical colleges in any state in the United States, after

¹"Educational Standards of the Medical Profession of New Jersey, Past and Present," by E. L. B. Godfrey, M. D. Delivered before the Medical Society of New Jersey, June 23, 1903.

²The College of Physicians and Surgeons of New York, the University of New York, the University of Pennsylvania, Jefferson Medical College and the Pennsylvania Medical College (defunct).

*Read at the 141st Annual Meeting of the Medical Society of New Jersey, June 25, 1907.

one year of study with a preceptor and two courses of lectures of not less than three months each, the right to practice upon depositing a translation of their diplomas with the clerk of the county in which they intended to reside. In 1880, the state made the filing of a bogus medical diploma a misdemeanor. In 1890, the state established medical examinations, through an Official Board, appointed by the Governor and confirmed by the Senate, and required all physicians thereafter beginning the practice of medicine within its province to obtain from said Board a license so to do, in lieu of registration of a diploma. In 1894, the state raised the educational qualifications for its certificate of license to three courses of lectures, and gave its Official Board authority to determine the standing of medical colleges and the status of examining boards of other states. In 1903, the state again, through enactment, advanced still higher the educational requirements for its certificate of license, exacting as preliminary qualifications a diploma from a high school issued after four years of study, or its equivalent, and a medical degree conferred after four courses of lectures of at least seven months each in an approved college. In 1906, the state required, through enactment, all asylums, sanatoria, hospitals and retreats, when operated as private enterprises for the care of the insane, to obtain a license from the Department of Charities and Corrections, thus regulating institutional as well as private practice.

This review shows that the State of New Jersey since its founding has regulated the practice of medicine either through examination or registration; that state examinations were instituted for the protection of the public health, and that the right to practice medicine has not been considered, at any time, as class legislation or as an inherent privilege of citizenship in New Jersey.

THE RIGHT OF A STATE TO ESTABLISH MEDICAL EXAMINATIONS.

I beg now to present the subject of the legality of state medical examinations from the second standpoint, viz., the right of a state to establish examinations for licensure and to regulate medical practice within its jurisdiction, under the authority of the Constitution of the United States.

It would hardly seem necessary to establish the constitutionality of state examinations for licensure since they have been statutory conditions for medical practice, both in the Government possessions and the states, for many years. But there are physicians who protest against such licensure

on the ground that the action of a state in debarring its own citizens, or legally qualified physicians of another state, from beginning the practice of medicine within its borders, except after state examination and licensure, is an abridgment of the individual freedom of citizenship guaranteed by the Constitution of the United States. Experience, however, has shown that protests of this kind do not come from the leading medical colleges, nor from the three great schools of practice recognized by the state; but chiefly from colleges of sub-standard requirements; from physicians who desire to remove from one state to another by reason of health, business, family relationship or temporary summer practice; or from that class known to the profession as "roving charlatans." With these complainants, personal interests appear to be paramount to professional welfare. So far as I know, no medical society has advocated, in consequence, any change in the policy of state examinations.

THE POLICE POWER OF A STATE.

For the more thorough consideration of the authority of a state to institute medical examinations, permit me to present the legal basis upon which state examinations rest, viz., the police power of a state.

At the ratification of the Federal Constitution by the several states in 1787, there were certain powers which the states would not surrender upon becoming members of the Union. The police power of the states was among these. The controversy regarding the rights of states under the Union led to an amendment to the Constitution in 1791—Article 10 providing that

"the powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states, respectively, or to the people."

Under this amendment, the police power of the states, which had not been delegated to the United States nor prohibited by the Constitution, was made a reserved power. The United States Supreme Court has so decided. In the case of *Jacobson vs. Massachusetts* (25 S. C. R. 358³), Mr. Justice Harlan, in rendering a decision concerning this power, said among other things that the police power of a state is

"a power which the states did not surrender when becoming members of the Union under the Constitution."

³"Facts and Fallacies Concerning Interstate Reciprocity in Medical Licenses," by James A. Egan, M. D., Secretary of the Illinois State Board of Health. Read by invitation before the Illinois State Medical Society at Springfield, May 17, 1906.

It may be asked, what constitutes the police power of a state? The answer is, that it is the reserved right of a state to regulate its domestic affairs and to provide for the health, morals and general welfare of its citizens; provided such regulation does not conflict with any organic statute of the Nation, or infringe on the police rights of another state. Vaccination, public health and school laws, pure food restrictions, compulsory registration of disease, vital statistics, crimes involving moral turpitude, state and municipal elections, etc., are among the reserved police prerogatives of a state. The police power of a state, therefore, comprises the protection of the health, the morals and the safety of its citizens. The Supreme Court of the United States has not only decided as to the origin of the police power of a state but has, in addition, rendered a decision as to the nature and extent of this power. In the case of *Lawton vs. Steele* (152 U. S. 136)⁴, Mr. Justice Brown said that the police power of a state

"is universally conceded to include everything essential to the public health, safety and morals."

Mr. Justice Harlan, in the case previously referred to, stated that

"the Court has distinctly recognized the authority of a state to enact health laws of every description; indeed, all laws that relate to matters completely within its territory."

Therefore, the states, in the execution of their right under the Federal Constitution to protect the public health within their respective territories, have each enacted laws for such protection, over which the Federal Government has no control. The practice of medicine in any state cannot legally fall within the province of Federal laws. Under their inherent, reserved, plenary and police right, the states have found that examination, preliminary to licensure and medical practice, affords the best means to protect the public health; consequently, they have instituted examinations as the best means to determine the fitness of physicians to begin the practice of medicine and to enjoy the immunities accruing to practitioners of the healing art.

With the reserved police right of a state to institute medical examinations conceded, your attention is called to two assertions frequently made by physicians: First, that state medical examinations are class legisla-

tion in disregard of the constitutional rights of state citizenship; secondly, that they are an abridgment of the individual rights guaranteed by the Federal Constitution. In respect to the first assertion, state licensure is disassociated from class legislation because it is in the interest of the public health which transcends the interests of any individual or class; in regard to the second assertion, two references to the Constitution are made by the complainants, viz., Section I of the Fourteenth Amendment, and Section II of Article 4. Section I of the Fourteenth Amendment to the Federal Constitution provides that

"All persons born or naturalized in the United States and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States nor shall any state deprive any person of life, liberty or property, without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws."

Is this amendment in violation or in abridgment of the police power of a state upon which state medical examinations have been instituted? Mr. Justice Field of the United States Supreme Court has decided (18 Wall 129),⁵ in the case of *Bartmeyer vs. Iowa*, that

"No one to his knowledge pretends that the Fourteenth Amendment to the Constitution interferes, in any respect, with the police power of a state."

Section II of Article 4 of the Constitution provides that

"The citizens of each state shall be entitled to all the privileges and immunities of the citizens of the several states."

Are state medical examinations in the several states in violation of this provision of the Federal Constitution? No! A state, in establishing medical examinations to safeguard the public health in virtue of its reserved police rights, demands no more from the citizens of other states than it exacts from its own.

Is there, in addition to these decisions, a specific opinion of the Supreme Court of the United States covering the constitutionality of state medical examinations? Mr. Justice Field, with the full bench concurring, in the case of *Dent vs. West Virginia* (129 U. S. 114),⁶ rendered an opinion that

⁴"Facts and Fallacies Concerning Interstate Reciprocity in Medical Licensure," by James A. Egan, M. D., Secretary of the Illinois State Board of Health.

⁶"Facts and Fallacies Concerning Interstate Reciprocity in Medical Licensure," by James A. Egan, M. D., Secretary of the Illinois State Board of Health.

"The power of a state to provide for the general welfare of its people, authorizes it to prescribe all such regulations as in its judgment will secure, or tend to secure, its people against the consequences of ignorance and incapacity * * * Due consideration, therefore, for the protection of society may well induce a state to exclude from the practice of medicine those who * * * are found, on examination, not to be fully qualified."

It is evident from these decisions of the Supreme Court of the United States that state medical examinations are legal; that they are not in violation of the constitutions of the several states or of that of the United States, but are based on the reserved police right of the states to protect the public health. The police power of a state is the line of demarcation between the right of a state and the Federal Government, in medical licensure. Each has its respective sphere in this matter. The Federal Government, therefore, has prescribed examinations for the beginning of medical practice in the District of Columbia and in the Army, Navy and Marine Hospital Service, and the several states have done the same within their respective jurisdictions, each independently of the other.

I have ventured to present the subject of the legality of state medical examinations somewhat in detail, from both the state and national standpoints, because reciprocity between states in which examinations have been instituted must be based upon and accord with the legality of those examinations. While the individual has the *inherent* right to qualify for the practice of medicine, and the medical college has the *charter* right to confer the degree of Doctor of Medicine, the states, alone, within their respective jurisdictions have the *police* right to establish medical examinations and to enter into reciprocal relations with other states.

The question has been frequently asked, whether the standing of practitioners licensed prior to the institution of state examinations has been impaired by subsequent statutes? No! The rights of those practitioners who complied with the law at the time of their registration are preserved in their respective states and are protected by the Federal Constitution, (Article I, Section 10) which provides that no *ex post facto* law shall be passed by any state. The stat-

ute of New Jersey provides for the eligibility of those practitioners to the licensing examination, as will be noted later.

SPECIAL INQUIRIES IN RESPECT TO STATE MEDICAL EXAMINATIONS.

There are several questions respecting state medical examinations which have been frequently propounded, the consideration of which may be of interest to this Society.

1. What have state examinations accomplished in New Jersey?

History gives the answer. Look backward to the educational requirements for the degree of Doctor of Medicine and the method of state registration prior to 1890, when New Jersey instituted examinations, and compare them with the present requirements for the practice of medicine, and the answer is fully given. The state has established and maintained definite educational standards in the interests of the people. It demands that its licentiates shall possess an academic training equivalent at least to that of a high school of the first grade, a degree in medicine issued after four courses of lectures of at least seven months each from an approved college, and satisfactory recommendations as to ethical and moral character. It has revoked the charter of bogus medical schools and has driven unlicensed practitioners beyond its borders so that the ratio of registered physicians in New Jersey to the population is about 1 to 800. Sec-tarianism has been practically banished from the three schools of practice recognized by the state, by the appointment of a joint Board of Medical Examiners, and the profession has become unified on the basis of common acquirements. The Attorney General has been made the legal adviser of the examining board, and District Attorneys are specifically required to prosecute violations of the medical statute in their respective districts. I have no hesitation in saying that New Jersey, in establishing medical examinations in 1890, has done more to protect the public health and to advance the medical profession of the state, than through any enactment since the incorporation of the Medical Society of New Jersey, one hundred and seventeen years ago. Experience in reciprocal relations with other states has demonstrated that the profession of New Jersey, seventy per cent. of whom are examined licentiates of the state, when compared with the licentiates of other states, stands without a superior in educational qualifications.

2. What would be the effect of establishing an additional licensing board, with

⁶⁴"Impracticability of Interstate Reciprocity," by Edwin B. Harvey, M. D., Secretary of the Massachusetts Board of Registration in Medicine. An address delivered before the National Confederation of State Examining and Licensing Boards, Boston, June 4, 1906.

lower standards and a limited field of treatment, as proposed in the Legislature last winter?

It would prove injurious to the public and detrimental to the profession. Medical legislation should be intended, primarily and secondarily, for the public good; and a state certificate of license should represent a single, fixed, minimum standard of qualification without differentiating between "pathies," cults or "isms." Therefore, all candidates should be examined by a single board and legally qualified on a common educational basis, since comparatively few of the laity can judge of the qualifications of learning and skill which a physician possesses. It has been well said by Governor Pennypacker that "The state should deny its certificate to practice medicine in any of its forms to any physician who denies the fundamental principles of medicine." It may be said, in this connection, that osteopaths do not require any legislation in New Jersey to practice their "pathy" alone.

3. What would be the effect of discontinuing state medical examinations?

The state could not then guarantee definite qualifications in its medical licentiates. The present standards of medical education would not only deteriorate but fraudulent practice would increase. History would repeat itself. The doctorate degree would be granted by inferior schools, in less than the time now prescribed, to students who preferred a short cut to medical honors. The present high standards for medical graduation can only be maintained through state examinations, for which the states should unite in framing uniform requirements.

4. Why cannot a national examining and licensing board be created, either by the Federal Government or through voluntary action of the American Medical Association, the certificate of which would be accepted, in lieu of examination, by the several states?

Neither of these propositions is tenable. The practice of medicine, law and other professions, is conducted under the reserved, police authority of the states, as previously stated. Over this authority, the Federal Government has no control. The Federal Government, therefore, cannot pass a National Practice Act and cannot legally establish, either through Act of Congress or appointment by the President, an examining and licensing board whose certificate the states would or could recognize, without amendment to the Federal Constitution in this respect. To amend the Federal Constitution in reference to the reserved, police

rights of the several states, would involve the surrender of definite state sovereignty on the one hand and the centralization of power in the Federal Government on the other. Two-thirds of both Houses of Congress or two-thirds of the Legislatures of the several states must deem an amendment necessary⁷; and, if adopted by Congress, the amendment must be ratified by three-fourths of the several states. The Federal Constitution has not been amended since 1870, when the Fifteenth Amendment was adopted, a period of thirty-seven years, notwithstanding the great problems that have confronted and still confront the Nation; nor is it likely to be amended to meet the views of a minority of the profession on the question of state medical examinations. For the same reason, Government supervision of examinations cannot be established through a national bureau or through the creation of a health department with a physician as chief and member of the Cabinet. The relationship between states is, however, becoming so close that, in course of time, the states may yield to the demand for uniform laws affecting inheritance, marriage and divorce, and the public health, in the interest of the people. The time will come when the Constitution, instead of reserving to the states the powers not delegated to the Government, will reserve to the Government the powers not delegated to the states in matters pertaining to the public health. A national voluntary board of any kind or from any source would have no legal standing and could not be recognized by the courts of the Federal Government or of the several states. The right to control medical practice must rest in the hands of the state under the present provisions of the Federal Constitution.

5. The plea is frequently advanced that a state certificate, earned upon examination, should be valid in all the states, on the ground that the science of medicine is the same everywhere. The theory of this plea is admitted but its application is impracticable because of the difference in medical statutes in the forty-six states.

6. It is claimed that a license issued by a European government is valid in all the states and provinces belonging to that nation and, therefore, a license issued by one American state should be valid in all the United States.

This claim is not wholly substantiated in respect to England, whose medical certificate is not accepted in all of her possessions. There is a marked difference between Eu-

⁷Article V of the Constitution.

rope and America in the issuing of medical licenses. European nations are on a monarchical basis; the United States is on a republican basis. In England and the Continental nations, the regulation of medical practice is the prerogative of the central government; in the United States, such regulation is the province of forty-six different state governments. In European countries, the universities are more or less under government supervision and their medical diplomas have a fixed and definite legal value; in the United States, medical colleges are mostly private institutions without government supervision, and diplomas issued by these colleges, under the authority of a state charter, represent varying standards and confer no legal status except in a few of the states. The difference between European and American methods is the fundamental difference between a monarchy and a republic—a difference as wide as the poles.

7. The plea has been advanced that a state should inspect the medical school to which it grants a charter; guarantee the validity and scope of its diploma and indorse the same in lieu of a state examination.

Medical laws are enacted primarily for the benefit of the people and are not designed to support any school or sect. A state has no specific authority to inspect a private medical school except when so provided by statute or charter; but the right of a state to determine the standing of a school carries with it the inferential right of inspection. The state cannot, however, guarantee the validity and scope of a diploma issued by a school which it does not control. State supervision of public schools and institutions maintained in whole or in part by the state, is in the interest of the people; but the acceptance of the diploma of a medical college, in lieu of a state examination, would delegate the police power of the state to that college, discriminate in its favor, set up a double standard of licensure, and defeat, in part, the intent of state examinations.

The Council on Medical Education of the American Medical Association has voluntarily inspected the 160 medical schools of this country, marking them on the scale of 100, to determine what should constitute a school "in good standing" in respect to preliminary education, curriculum, laboratory equipment, hospital facilities, etc.⁸ It was found that 81 schools attained a marking

above 70, 47 between 50 and 70, and 32 fell below 50. Of these 160 schools, it appears that only about 50 per cent. are on the accepted list and are recommended for recognition by state boards. This inspection demonstrates the need of endowments for medical colleges and of an agreement between state boards as to what colleges shall be considered "in good standing."

RECIPROCITY IN MEDICAL LICENSURE.

Permit me now to present the second section of my subject, viz., interstate reciprocity in medical licensure. This is a complicated and perplexing question. It has recently been placed before the profession in an exaggerated, absurd and erroneous light by Dr. William J. Mayo, in his presidential address before the American Medical Association in June last.⁹ Dr. Mayo's statement that the present conditions of reciprocity are well-nigh intolerable, is an exaggeration, since about fifty per cent. of the states are exercising reciprocal privileges. His statement that the boundaries between states are imaginary lines in this respect, is an absurdity which any state or Federal court would quickly denounce, and his further statement that consulting or emergency practice over state border lines is illegal, is an error which any state board will refute.

Reciprocity is not a compulsory requirement but a discretionary privilege. It is exercised in the interests of both the public and the profession and rests upon uniformity in state standards. It promotes the public good by raising state standards since no state will lower its standards to obtain reciprocal privileges. It will protect the public good by limiting the interstate migrations of charlatans. It sets a premium upon higher education because it is denied to graduates of sub-standard colleges and licenciates of sub-standard boards. The extension of reciprocity under the present high conditions of state licensure is also in the interest of the profession. The advances in medical education; the opposition to re-examination in practically the same branches; the desire to remove from one state to another, or to practice in more than one state; the convenience of interstate travel and other reasons, heretofore named, have combined to make reciprocity a professional necessity between states of comparatively equal standards.

Reciprocity in licensure between states

⁹"Facts and Fallacies Concerning Interstate Reciprocity in Medical Licensure," by James A. Egan, M. D., Secretary of the Illinois State Board of Health.

⁸*Journal of the American Medical Association*, May 18, 1907.

means the mutual recognition by states of each other's certificates on the basis of equality in value, and is limited to states of substantially equal standards. Indorsement, as distinguished from reciprocity, means the acceptance of the certificate of one state by another,¹⁰ irrespective of reciprocal relations, on the basis that a state of lesser may indorse a state of higher requirements and thereby extend the courtesy of indorsement in the interest of medical progress. This may be illustrated by the present position of New Jersey, whose certificate of license is indorsed by sixteen states because of its high standards; while reciprocal relations cannot be extended to several of these states because of their lower educational requirements, either academic or medical.

With these prefatory remarks, permit me to present the subject of interstate reciprocity in medical licensure from four standpoints: 1. Legality. 2. Limitations. 3. Necessity and Justice. 4. Method of Accomplishment.

THE LEGALITY OF INTERSTATE RECIPROCITY.

Reciprocity and indorsement are natural outgrowths of state examinations. They are, in consequence, fundamentally legal questions. In New Jersey, they are integral parts of the statute establishing examinations. They are based, first, on the reserved, police right of a state to regulate the practice of medicine within its jurisdiction for the public good; second, on the specific provisions or general powers of the statute of a state to establish examinations and reciprocal relations with other states, and, third, on a voluntary agreement between state boards concerning conditions and methods of execution. No state can compel another state to indorse its certificate of license. Each has an independent legislative body of its own; nor is there any statute, national or interstate, governing reciprocal relationships in medical licensure between states. Under its constitutional right, each state has adopted a standard for licensure and is the judge of the qualifications of its licentiates. Absolute uniformity in examination and licensure between all of the states is unattainable at the present time; but in many states licensing boards have discretionary authority to establish reciprocity under conditions of comparative uniformity.

The conditions of agreement must accord with the legal powers of a given state and

embrace the preliminary and medical education and the moral character of an applicant, the standard of requirements for licensure of the reciprocating states, the method and scope of the examinations, the rules and regulations of licensing boards, state examination and licensure in all cases, and the indorsement of the original license only.

The execution of the agreement should admit of calling for copies of the original papers in the case of applicants licensed prior to the establishment of reciprocity, and of doubtful applicants. This should be done without unjust discrimination against any applicant and irrespective of professional sentiment. Full faith and credit should be given by one state to the acts, records and proceedings of the other. Unless reciprocity is established on a legal and equitable basis, it cannot possibly stand.

THE LIMITATIONS OF INTERSTATE RECIPROCITY.

Reciprocity must of necessity be limited to states of substantially equal licensing standards; otherwise, it would degenerate into nothing more than an exchange of certificates in which the weaker states would hold the upper hand because of their numerical majority. What limitations, it may be asked, surround reciprocity?

FIRST: The difference in requirements of medical colleges in respect to matriculation and graduation. A large percentage of medical colleges are not in good standing with the greater states, and the diplomas of some are accepted only as the equivalent of three courses of lectures, or less. Applicants for the license of New Jersey from the latter schools must graduate from a recognized college in order to become eligible for admission to the examinations of this state. The standards of the medical colleges are not uniform and the American Medical College Association has failed thus far to enroll many colleges in its membership. Medical colleges cannot justly demand reciprocity between states while their standards are not uniform.

SECOND: The inequalities in the standards of the several states in respect to licensure constitute the second limitation. There are a number of states in the West and South of sub-standard medical requirements and a number in which no academic requirements are exacted. Reciprocity cannot be effected between states of unequal standards, either preliminary or medical.

THIRD: The diversity in the rules of examining boards as to methods of examination and percentages given (which vary

¹⁰The word "state" is used in this paper as synonymous with state medical examining and licensing boards, as a matter of convenience.

from 10 to 40), makes the third limitation.

FOURTH: The issuing of a state certificate on other bases than a state examination is the fourth limitation. A state license on the basis of a medical diploma is granted by a few of the Western states in the interest of old physicians who were in practice prior to the legal requirement of state examination; but the Eastern and Middle states exact a state examination for licensure in all cases. A license granted on any other terms fixes a double standard for licensure and nullifies the intent of state examination, the pivot on which reciprocity turns. While the object of law is to protect the rights of all without discrimination, yet a state has to enact laws discriminating between the worthy and the unworthy, in virtue of its police right to protect the public health. This is not class legislation. Neither a state nor an individual is eligible for reciprocity unless the requirements of the state from which reciprocity is asked, are met. State examinations for licensure may occasionally work a hardship to old practitioners, but their number is small in proportion to the number who hold a state certificate and it is steadily decreasing. In New Jersey, state examinations have been required for the past seventeen years and about seventy per cent. of the present practitioners hold the certificate of license of this state. Laws are enacted for the good of the community rather than for the individual, and the justice of this is exemplified by the fact that there are but few applications for examination from practitioners of the old regime; although they are eligible for admission to the examinations of this state under exemptions. In some states, after the papers are graded, five points credit are given for five years of reputable practice since graduation from a reputable college, and one point for each succeeding year.

FIFTH: There are a few states that indorse the license of those states only which in return indorse theirs. This limitation in some states is statutory and in some voluntary. In either case, the position is selfish, retaliatory, non-progressive and contrary to the spirit of the times and the ethics of the profession. The voluntary refusal of a state to indorse the license of another state of higher standards is unjustifiable, especially when the licentiate is of national reputation. If a state admits to its examinations, applicants refused by a higher state, it should, in justice, license by indorsement the examined licentiates of that state.

SIXTH: Some states, notably Massachusetts, will not indorse the certificate of any state; and a few states have no legal provision for reciprocity or indorsement. These states retard the spread of reciprocal relationships, the general elevation of state standards and the unification of the profession.

SEVENTH: The moral character and professional standing of applicants occasionally limit reciprocity or indorsement, in individual cases. The possession of a state license, earned upon examination, can only be regarded as one of the several conditions of reciprocity.

EIGHTH: The requirements for reciprocity should be substantially the same as those for examination; consequently, graduates of medical schools not in good standing with a given state cannot be indorsed by that state, even when holding a certificate from an acceptable state; unless the school was in good standing at the time the applicant was graduated. Each state must be the judge of its own requirements and of the qualifications of applicants for its license; yet a minimum standard for a recognized school of medicine should be agreed upon by examining boards.

In view of the limitations that must necessarily surround reciprocity, it must be admitted that this question is of a complex nature and of slow development.

THE NECESSITY AND JUSTICE OF RECIPROCITY.

The necessity and justice of interstate reciprocity, or indorsement, are based on two factors, the increasing demand for interstate medical licensure and the nationalization of the medical profession. A few years ago reciprocity was requested by the few; now it is demanded by the many and the number is steadily increasing. When this demand is based upon substantial equality in licensure between states and upon the individual merit of applicants for license, the interests of the profession justify its recognition. The nationalization of the medical profession is an admitted necessity. It would mean progress, promote organization, stimulate professional work and increase the prestige of the profession in sanitary matters of national and international importance. This country is becoming more homogeneous every year and the profession should see to it that its homogeneity keeps pace with the development of trade.

The justice of reciprocity cannot be questioned, provided it is based upon the principle of substantial equality, legally executed. When a physician holding a state

certificate of license *earned upon examination* presents the same to a state of substantially equal requirements, indorsement should be granted, provided all other requirements are fully met. On this basis, also, reciprocity should be established. A re-examination in essentially the same branches is not necessary for the maintenance of state standards when the conditions just outlined are complied with.

METHOD OF ACCOMPLISHING RECIPROCITY.

In the absence of uniformity between states in their medical statutes and examining board regulations for licensure, it is clearly evident that reciprocity can be best effected by grouping together states of substantially equal licensing standards. I venture to recommend that a convention of the examining boards of such states should be called for this purpose. If a division of states into reciprocating groups were effected, the profession would compel, in the near future, the groups of weaker states to raise their standards and to join the stronger groups.

As to the method of executing reciprocity between states, I know of none better than that of New Jersey, whose standards are equal in all respects to those of the highest states in the Union. The method of New Jersey requires candidates for license by indorsement to meet substantially the same requirements as candidates for license by examination.¹¹ The requirements of New Jersey are as follows:

1. Certified evidence of a diploma granted after four years of study in a high school of the first grade in this state, or its equivalent as determined by the State Superintendent of Public Instruction.
2. Certified evidence of a medical diploma issued after four courses of lectures of at least seven months each in four different calendar years, from an approved medical college.
3. Copy of a certificate of state medical license, duly certified as to examination and licensure and showing that the standard of requirements of the issuing state is substantially the same as that of New Jersey.
4. Certified evidence of good moral character.
5. A letter of recommendation from a registered physician of New Jersey.
6. A recent, signed photograph of the candidate with affidavit as to identity and signature.
7. Registration of copy of New Jersey

¹¹ Report of the State Board of Medical Examiners of New Jersey, for 1905.

license in the office of a county clerk, and the filing of all credentials in the State Library.

Concessions have been made to older practitioners to render them eligible for licensure. Those who were graduated prior to July 4, 1894, when the Medical Act was first amended, and have been in continuous and reputable practice since, are eligible for license upon evidence of state examination, good moral character, two courses of medical lectures in different years, and a preliminary education according to the standard of that time. Those who were graduated prior to July 4, 1903, when the Act was again amended, and can show evidence of five years of continuous and reputable practice since graduation, are eligible for license upon evidence of state examination, good moral character, three courses of medical lectures in different years, and a preliminary education according to the standard of that time.

In reviewing the subject of state medical examinations and reciprocity in licensure, it admits of no question but that the present high standards should be maintained for state licensure, irrespective of the criticism of the weaker colleges; that reciprocity should be extended as rapidly and widely as the equality of high standards will permit; that members of state examining boards should be eligible for the state certificate they bestow, and that state examining boards should keep out of politics and politics should be kept out of the state boards.

Permission was given by Dr. James A. Egan and Dr. Edwin B. Harvey to quote from their publications.

DISCUSSION.

Dr. William Perry Watson, of Jersey City.—Every State medical registration law should have three objects: First, to divorce the teaching from the licensing power; second, to require suitable academic and medical education, and, third, to harmonize and unite the physicians of the State. It is very difficult to enact a medical law acceptable to everybody—much more so to have its provisions strictly observed; the requirements and wishes of the people must be taken into consideration; it must be neither too rigid nor too lax in its statutory requirements or their enforcement. When, in 1890, Dr. James T. Wrightson, of Newark, inserted in the medical bill enacted that year, that graduates of five or more years should be examined only in four practical subjects and that rejected applicants had the right of appeal for a review of their rejections, he builded better than he knew; the recent graduates had nothing to fear and the older ones were well protected, so that after a safe and sane enforcement of that act for four years it was comparatively easy to

secure the new—practically—medical law of 1894, drawn after a careful study of the then existing State laws and the practical workings of our own, placing all applicants on the same basis, and the final corrections and additions thereto, nine years later, gave us a medical law second to none of our sister States, and no member of this society should regret the progressive developments from conditions existing prior to 1890.

While there are always a few bright applicants at each of our semi-annual examinations, yet the average personnel at the examinations held last week was far above that of ten years ago—a condition brought about by our advanced academic and medical requirements, inducing young men and young women to get a good academic education (the percentage of college graduates is increasing yearly) before commencing a medical course, and then taking such course in our best medical schools, instead of in the one from which it is the easiest and cheapest to get the degree of M. D.; and, finally, a review of the examination papers submitted during the past year will show a much higher average grade than those of ten or even five years ago, candidates no longer telling me that they would give a three-months-old bottle-fed infant all the cracker soup it could eat, or that the eruption of measles had a "measley" appearance.

Our present law is not perfect, but it is a better one than any other similar State law, with one exception, while the carrying out of its provisions could be improved upon. Possibly each of you have in mind an ideal medical law? I have one, and it is somewhat as follows:

The practice of medicine should be positively defined and the exemptions to the same clearly stated, as well as the proper modifications for graduates of five, ten or fifteen years' standing. The Board of Medical Examiners should consist of nine members of recognized professional ability and honor, and whose powers should be both judicial and executive in all matters pertaining to the medical profession of the State. It should meet three days at least in July and September, respectively for the examination of candidates desiring to practice medicine in the State; each member of the board should prepare the questions in his branch and submit them to the entire board for their final approval before presenting them to the candidates; the examination papers should be reviewed and graded by a committee of three members, the examiner himself being the chairman of said committee, and the final reports of such committees should be reviewed by the entire board acting as a committee of the whole. Any candidate having a total average percentage of less than 75, or whose percentage, in any one subject, was under 50, should be refused a license. Candidates rejected on account of a low average should be allowed a second examination, but after a second rejection said candidate should be required to take a full course of medical study for one year.

Candidates for examination should present reliable evidence of holding a baccalaureate degree, or a certificate of academic study equivalent to admission to the sophomore class in either Princeton or Rutgers before commencing the study of medicine, and further show instruction in medicine and surgery and their correlative branches in a medical school, properly equipped to give such instruction, both didactic and clinical, for 5,000 hour-units, equally distributed over a period of not less than four years, and then they should

be examined in anatomy, chemistry, physiology, obstetrics, gynecology, hygiene, medical jurisprudence, medicine—including histology, bacteriology, pathology, dermatology and physical diagnosis and surgery—including surgical anatomy, pathology, diseases of the genito-urinary organs, eye, ear, nose and throat, such examinations being written and in the English language; and in medicine and surgery there should be in addition an oral and clinical examination conducted by the examiner in those branches, respectively, before the whole board; the written one to count 50 per cent. and the other 50 per cent. The examinations, excepting the oral and clinical ones, should be conducted by the secretary of the board. The board should have the privilege of endorsing, without examination, a certificate issued by another board of similar requirements after a personal investigation of said board and its workings. All fees received from candidates should be turned into the State treasury and the State should pay each member of the board an annual salary, with an additional one to the secretary, whose duties could be performed by the secretary of the State Board of Health or the State Superintendent of Public Instruction.

Under such a medical statute, operated by a high-grade medical board—which should be to the physician what the Supreme Court is to the lawyer—the medical profession of New Jersey would very soon stand foremost among the medical bodies of the world.

Dr. Mortimer Lampson, Jersey City.—I have listened with a good deal of interest to this somewhat lengthy paper, and also to the views and opinions of another member of the State Board. You will observe, of course, that this paper is a virtual defense of the State Examining Board. They have come here for several years with a feeling, perhaps, that they needed some defense. I am not trying to invalidate any of the statements that have been made; but I am old-fashioned, and I know that there are a good many men in the Medical Society of New Jersey that, whether for good or evil, whether they have ground or not, do not believe in the Examining Board as now constituted.

Now there are some features that strike me, some words that have been used in Dr. Godfrey's paper, that I object to. I do not agree with his statement that there are three *great* schools of medicine. I deny it. I know that the Examining Board of the State of New Jersey has what is assumed to be three schools of medicine represented in its membership. Within the last year they have proposed to add another; and I suppose that in two or three years we shall have some more, and perhaps shall wind up with a very exalted and extensive board, which will contain the old-fashioned doctor, the homeopath, the Christian Scientist, eclectic, the osteopath, the corn-doctor and several others. They all should be represented, no doubt; but, as I said before, I am doubtful about it. I am old-fashioned. When a good Mussulman, a disciple of Mohammed, was asked why he could not consider the Christian religion as being the proper thing, he said he would not have any objection to so consider it; only that the Christian, when you start out to make any arrangement with him, commences with the proposition that Christ was the only prophet and will not consider Mohammed's claims at all. Now, I start out with the proposition that there is only one *true* school of medicine. I deny in

toto that any examining board in this state or any other has had any influence in advancing the merits or standing of the profession. I ascribe its advancement to that great increase in the knowledge of science which we, in recent years, have seen; and I believe that I stand in the same attitude that the Mohammedan complained of with the Christian. I say that there is only one real, honest school of medicine. An examining board that contains several different brands may, through force of circumstances, through a compromise, or through a legislative enactment, hold my respect to a certain degree; but it costs me an effort.

If I had a son and were intending to make a doctor of him, I should feel very sorry to send him before an examining board so constituted, to whom he would be bound to present a fee after I had lavished my substance on him—to men, some of whom I denominate as entirely outside the profession. As to the question of fees, my proposition is that if an examining board seems necessary for the benefit of the people exercising the police powers of the state, as Dr. Godfrey says, the state should pay for it, and should not impose it on a lot of young fellows who have just spent their last cent in trying to get a medical education. I also believe that the present Board of Medical Examiners have instituted singular financial rules—whether law or not, I am not prepared to state; but I know that a doctor who qualifies in New York and makes an application to practice in New Jersey is taxed fifty dollars. He can take his examination before our board for twenty-five; so you see it is a distinct advantage to the board for him to take the examination in his own state and not here. As I have said, I wish to disclaim any personal reflection upon any member of the board. I do not like the tone of a paper that states at the outset that there are three great schools of medicine. I deny it; and in so doing, I believe that I speak the sentiments of a large majority of the members of the Medical Society of New Jersey. And let us not, under any circumstances, encourage scientific or professional heresies; but the truth, always the truth! as this noble old society of New Jersey, now assembled on its one hundred and forty-first birthday, has always done; and our professional standing with the people of New Jersey will take care of itself.

Dr. Henry H. Davis, Camden.—I would like to ask Dr. Watson, who has given much thought to this matter, of what schools the nine members of the Board of Medical Examiners are to be composed. While the gentleman before me has disclaimed all belief in different schools of medicine, the fact remains that we have different colleges under different names, all graduating doctors of medicine.

Dr. Dowling Benjamin, Camden.—Dr. Lampson has stated that if two gentlemen, equally qualified, were permitted to appear before the state board for examination, and one should give fifty dollars, he would be endorsed, and would not if he did not; while the other will be examined if he gives only twenty-five dollars. What, then, is the object of the examination? Why does not the man with the fifty dollars need the examination just as much as the man who has only twenty-five dollars? Is the examination to be used as a club to make the poor fellow give up another twenty-five dollars or take the risk of failing to pass? I am told that one man at least

borrowed the additional twenty-five dollars. I think I would do the same. Since examinations are more trouble to the board than endorsements, why not charge fifty dollars for the examination also, or if the examination can be waived for fifty dollars, why not for twenty-five dollars. I have been told by a number of physicians that Dr. Lampson is correct, and that this state of affairs actually exists, through a law introduced at the request of a member of the board. Now, if such are the facts, is it not a disgrace to any state? Can we not maintain our reputation for civic righteousness by having these corrected?

Dr. A. K. Baldwin, Newark.—It seems that Dr. Godfrey is trying pretty hard to make his subject pleasing. I think, myself, that he was unfortunate in making that remark, if he did make it; but the main drift of his discourse has been to the effect that all that is wanted in any state in the Union, and especially in New Jersey, because it stands preëminent—New Jersey, Pennsylvania and New York—is proper education in medicine. It does not make any difference what ism, what pathy, one belongs to. The education should be equivalent to a high school education, and it is hoped that in time it will be a collegiate education and the four year course. That has been the main drift of Dr. Godfrey's discourse, and it seems to me that he is absolutely right. He simply states that all that has been required in state board examinations is thorough education in medicine. Beyond all question, this is so. I can speak, because I know. I have been a member of the state board for nine years, and ever since boards have been instituted, and especially since our board has been instituted, the grade has been raised. The graduates of those colleges of no standing whatever that have given their graduates diplomas have been found incompetent, beyond all question when they have appeared before these boards, especially that of New Jersey.

Dr. E. E. Worl, Newark.—I was a student when this law was passed in New Jersey. Under the New York law, Governor Hill was kind enough to exempt those already registered; but New Jersey made us pass an examination. It was Dr. Wrightson who told me what a good thing this law was to be and what good effects we were going to have from it. We have a right to judge the tree by the fruit it produces; and we have a right, after seventeen years' experience, to expect these medical examiners to let us know how far they have protected us, especially young men who have our practice to make. If you find men violating this law and write to these examiners, they send a copy of the law and call your attention to the section that says it shall be the duty of the district attorney to prosecute violations of this act. If you were to go to the district attorney, he would say: "If you furnish the facts, I will go into the case and examine it." I have here a list of twenty unregistered practitioners in my own town, men whose names do not appear in the list of registered physicians. What shall we do? Whose duty is it? Our medical association does not appear to be active in the prosecution of these cases; it is no one man's duty more than another's. You cannot get the state board to take it up. In my own town a woman died under the ministrations of an Italian woman living in the Italian quarter. What shall we do with her? The case has been brought to the attention of the district attorney, but nothing has been done.

We should add to this law and go further. Physicians should have some additional power in such matters. We now have Christian Science practitioners, and it is only the activity of the boards of health that has made them modify their religion enough to report contagious cases. Of course, the state law having been passed, I am a believer in it. I believe its powers should be strengthened, rather than lessened; for if you get a homeopathic governor, he will believe that the homeopathic school is the only one. I came up from Trenton with a New Jersey legislator who said that he is under the charge of the osteopaths and believes in them.

Dr. J. C. Felty, Trenton.—I should like to ask the Medical Board of Examiners whether there are a considerable number of medical colleges whose diplomas they refuse to receive. If there are, that would be an argument in favor of the usefulness of the board.

Dr. J. Henry Clark, Newark.—I should like to ask some member of the Board of Examiners whether any county society has sufficient power to stop illegal practising; whether the laws as they exist are sufficient to cover the cases; what are the legal methods necessary to adopt to put out of business an illegal practitioner in the state of New Jersey? I know of a case in question. In our city of Newark a case is to be reported to the Essex County Medical Society. If it should be referred to the prosecutor, is he the proper one to take the case up and call the necessary witnesses, etc.?

Dr. A. K. Baldwin, Newark.—We had a doctor in the city of Newark who practised illegally, and I saw the President of the Board of Health and asked him about it. He sent an agent up to the doctor, who prescribed for him and received from him a fee. There was a new prosecutor, before whom the doctor was brought; he was convicted, and suffered the penalty—a fine was imposed for the first offense.

Dr. E. E. Worl.—Regarding the case quoted by Dr. Baldwin, after the man had paid the fine, he appealed the case to test the constitutionality of the act, and while the case was in court he died.

Dr. George H. Balleray, Paterson.—I have little to say but I have been very much pleased with Dr. Godfrey's paper. I am glad to know that the state of New Jersey has rejected so many colleges and refused to examine their candidates. I believe that the multiplication of colleges is the curse of the medical profession in this country. Their existence is due to the undying fondness some men have to be known as "professors." Professors are, in some localities, as thick as mosquitoes in a New Jersey swamp, and as noxious. I am glad the examining board of our state is refusing to recognize some of these colleges. One thing that I think would be an improvement over our state examining board would be a national examining board. If you have forty-six boards, it is difficult to get uniformity. In some states the examination is entirely inadequate; and even in our own state, a certain number of men that are not qualified to practise are sometimes allowed to get through. They are graduates of colleges in which the course of study is not what it should be. It was said by Dr. Osler two years ago, that some state boards are iniquitous. They know no more about the science of medicine than tom cats. It is a

disgrace that good students should have to go before them and submit to an examination by them. These statements do not apply to our own state. We can say that we have good men; but we must realize that, in order to get this board, we have been obliged to put in the homeopaths and eclectics, and may have to have the osteopaths and various others. I do not believe that much has been gained in the tone of the medical profession, except that the standard of preliminary examination has been raised, which is an important matter. If our board is to do good, it must continue to weed out those medical colleges which have no *raison d'être*.

SOME REMARKS ON THE LYMPHATICS.*

By E. Zeh Hawkes, M. D., Newark, N. J.

The blood does not come into direct contact with the tissues. Cell nutrition is through the intermediation of the lymph. Lymph surrounds each individual cell and brings to the cells the required nutrition and oxygen. Likewise intercellular lymph receives the waste products resultant from cell activities.

Diffusion from the blood capillaries is not due to osmosis, but is regulated by impulses originating in the cells and transmitted from them to the capillaries. It is a true selective process, dependent upon the needs of cell nutrition. Likewise, absorption is a selective process. Absorption is by both blood capillaries and lymphatics. Blood capillaries seem to have a selective action by virtue of which they take up unused plasma, water, salt solutions, CO₂. Waste products, broken down cells, water, salt solution are taken up by lymphatic capillaries. Lymphatic capillaries also absorb the secretions of the thyroid, suprarenal and other ductless glands.

Besides these purely physiological functions the lymphatics are also active under pathological conditions. Whenever pathogenic germs gain entrance into the tissues and multiply there, the products of germ activities, the toxins and the broken down tissue cells, together with the germs themselves, are taken up by the lymphatics. The delivery of these toxins into the blood is associated with fever and other symptoms, which we call constitutional symptoms. The onset of constitutional symptoms may be accompanied by a chill, after which, absorption of toxins being continuous, there are more or less continuous constitutional symptoms, but no further chills. Repeated chills occur not from absorption by the lymphatics

* Read at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

but where products of infection are delivered directly into the venous system, as the venous sinuses of the uterus, sinuses of the brain or liver, marrow of bones, or where local foci of infection occur in the circulatory system itself, as in malignant endocarditis or with metastatic abscesses. The subsidence of constitutional symptoms means that absorption is ceasing, not that infection is over. It may be because the products of infection are escaping externally, as when an abscess is incised or because the infection has been walled off. An appendiceal abscess has marked constitutional symptoms at first. Then, when the abscess has become well walled off, constitutional symptoms may decline or disappear. Then when the abscess is incised, fever returns. The walling off had mechanically blocked the lymphatics, but opening the abscess removes the obstructing pressure and the lymphatics again absorb toxins, followed by return of constitutional symptoms. Likewise, when a malignant growth develops in any tissue, the lymphatics take up the toxins of the neoplasm and also favor extension of the malignant growth.

We have been in the habit of thinking of the spread of cancer as occurring in three ways: first, the unusual extension by means of the veins; second, the local growth by direct cell contiguity, and third, the metastatic extension through the lymphatics,—the two last being distinct types of extension. As a matter of fact, the local is almost entirely and the metastatic is entirely an extension by means of the lymphatics. Local extension is along the lymphatic capillaries and intercellular lymphatic spaces, and without these lymphatic intercommunications extension would be very slow. Take for illustration an epithelioma beginning in the squamous epithelium of the cervix uteri. The cancer grows, it has been said, in every direction, from the surface and along the surface and into the tissues under the surface. But if, after the cancer has grown for a time, the surgeon with a sharp curette removes the friable growth, the cavity left extends deep into the cervix and deep laterally under the surface. The surface epithelium over a large area is healthy and has been extensively undermined, the undermining representing the difference between direct extension by cell contiguity and local extension by means of lymph spaces. Likewise, in malignant growth of the pylorus, extension is wide into the submucous lymphatic tissues of the stomach, but into the duodenum, which generally has no lym-

phatic connection with the pylorus, extension rarely occurs.

The distribution of the lymphatics is of interest and of great surgical importance. The distribution is not universally the same. They are abundant beneath the skin, in the absorbent mucous membranes, in the groin and axilla, in the liver, kidneys, lungs, muscles. They are absent from the mucous membrane of the bladder and from the brain. In general, they are most abundant where the requirements for absorption or for active tissue metabolism is greatest and vice versa. Lymphatics are arranged in definite systems. The hollow viscera as a rule have three systems of lymphatic vessels. The stomach, for instance, has a very abundant lymphatic plexus, beginning just beneath the surface epithelium for the mucous membrane, another for the fibro-muscular coat and an external, peritoneal surface system, the three systems anastomosing freely. Likewise, the intestines have three systems. The bladder, however, not having an absorptive function, has but two systems (except at the prostate): one of the external surface and one of the fibro-muscular layer. The mucous membrane has no lymphatics. When, therefore, carcinoma originates in the bladder, it grows very slowly. It remains a localized surface growth, often pediculated, and only after a comparatively long time has the growth by contiguity of cells, which is a true extension by contiguity, reached the muscular layer with its lymphatic vessels. It then extends rapidly. On the other hand, carcinoma, originating in the mucous membrane of the stomach, with its rich lymphatic supply, infiltrates rapidly along these lymphatic channels, indurating the stomach wall far from the surface growth and early involves the lymphatic glands.

In the small intestine, where, however, carcinoma is rare, infiltration and involvement of the glands followed by metastases is rapid. In the large intestine, except the rectum, with its less abundant lymphatics, carcinoma remains a local growth longer than in the small intestine, obstruction of the bowel from local growth occurring before there is metastasis. The brain has no lymphatics except of the membranes and ventricles. Abscesses of the brain, therefore, unless involving also the membranes or associated with venous thrombosis, do not give general toxic symptoms, only those of pressure. When, however, the surgeon opens the abscess, soiling of the arachnoid is often followed by rapidly extending in-

fection and pronounced constitutional symptoms.

Another important matter is knowledge of the anastomotic relations of the various neighboring lymphatic systems. Sometimes they anastomose freely, sometimes they are absolutely isolated from each other. The lymphatics of the mucous membrane of the vagina, for instance, are very abundant and are isolated from those of the external genitals. In an infant, if the needle injecting these lymphatics with mercury be introduced just inside the hymen, the mercury will spread out just beneath the epithelium of the whole vagina. But, if the needle be introduced just outside the hymen, the mercury will spread out externally and the vagina remain not injected. In the adult vagina this isolation is not quite so complete, there being a few anastomotic branches between these two systems. So infections just outside the hymen will cause swelling and tenderness of the inguinal glands, while infections just inside the hymen will drain to the pelvic glands and give no visibly enlarged glands. The lymphatics of the cervix and of the body of the uterus are, except for anastomoses, separate. So infections of the cervix may cause deep-seated pelvic abscesses, while the body of the uterus may remain healthy. Cancer of the cervix may cause death of the patient and at autopsy the growth be found widely infiltrating broad ligaments and bladder and rectum, yet the body be only partly diseased, and, vice versa, cancer of the body may be far advanced without involving the cervix.

The isolation of lymphatic systems is most strikingly illustrated in the stomach. Here the lymphatics of the mucous membrane are divided into three systems, one of the lesser curvature, one of the greater curvature and one of the fundus, the two former occupying the pyloric two-thirds and anastomosing freely together and the latter the remaining one-third of the stomach. Those of the pyloric two-thirds are absolutely isolated from those of the fundus. Likewise, the pyloric lymphatics, except for occasional anomalies, are absolutely isolated from those of the duodenum. If now, cancer develops in the pylorus it will infiltrate widely toward the greater and lesser curvatures and involve the glands along these curvatures and have secondary metastases, but the fundus of the stomach and also the duodenum adjacent to the pylorus will remain free.

Enlarged glands generally mean bacterial

infection or malignant diseases in the area drained by these glands. Glands are placed intermediate between the general circulation and the periphery and attempt to prevent systemic invasion by bacteria and malignant growths and poisoning by toxins. So often are the glands called upon to exercise this protective function and so great are the struggles, that the glands become damaged. Indeed, it is said that a strictly normal lymphatic gland can be found only in childhood.

A knowledge of the direction and course of the lymphatic flow from any organ or area will help us to understand the progress of the disease, and to infer the cause of developing symptoms. Thus puerperal infections are first localized in the uterus. Then there is a lymphangitis out into the broad ligaments, ending in the pelvic glands or passing beneath the ovary behind the peritoneum up to the lumbar lymphatic glands. Anywhere along these paths of extension infection may localize. We are too apt to look upon puerperal infection as purely of the uterus or of the uterus and peritoneum. We should look and look repeatedly for a localizing cellulitis or ovarian abscess or pelvic peritonitis. Some one or more of these will generally occur before general peritonitis and will at the beginning have symptoms suggestive of peritonitis. Their recognition and treatment will often prevent the occurrence of general peritonitis.

Another important consideration is the life history of the lymphatics. They are most abundant in early life. After the completion of maturity they begin to diminish and at old age have to a large extent disappeared. Some anatomists believe that at old age the glands have entirely disappeared. The influence of this upon pathological processes is great. Diseases due to germ infections are attended with marked constitutional symptoms in children and young adults, less marked in middle life and at old age are comparatively slight. Peritonitis well illustrates the difference. It is estimated that abscess formation occurs as a result of fifty per cent. of all attacks of appendicitis in children, and in quite a large proportion of cases the peritonitis is general. At middle life and thereafter general peritonitis seldom, and at old age almost never, results from appendicitis. General peritonitis quite frequently develops as a result of criminal abortion in young girls, very seldom in women of middle life. A practical deduction from this is that postponing operation in doubtful cases is far more dangerous in the young than in the

middle-aged and the old. In malignant disease, age is also a great factor. The younger the patient the more abundant and more active the lymphatics, and consequently the more virulent the malignancy. In the very old, with most of the lymphatics abolished, cancer is by comparison benign, remains for a long time a local growth, progresses slowly, has late metastases and is fatal only after the lapse of many months. The influence of age upon the virulence of cancer is well illustrated in cancer of the uterus. Squamous cell carcinoma of the cervix and adeno-carcinoma of the cervix occur most frequently between the ages of forty and forty-five, adeno-carcinoma of the body at the average of fifty to fifty-five. The two former are very virulent, the latter almost always curable by operation. And, taking cancer of the cervix alone, to make the comparison more forcible, it is found that in young women it is rapidly fatal, in the old it grows much more slowly.

The advantage of late development is also well illustrated in cancer of the breast. If the growth begins comparatively early, say at the age of forty, no matter how thorough the operative procedure, metastases may occur, because at this period there are lymphatic channels leading across to the opposite breast, and also through the intercostal spaces to the mediastinal glands, the latter of which cannot be removed. At a later age, say fifty, not only have all the lymphatics diminished but the channels going to the other breast and those to the mediastinal glands have become obliterated, and the operative prognosis becomes much better. In old age, say seventy, cancer of the breast is still less virulent. Indeed, these old women are the cases that are sometimes successfully treated by caustic applications, the cancer being entirely a local disease.

Although cancer may be disseminated by the veins, especially cancer beginning in areas drained by the portal vein, the usual method of extension is by the lymphatics. The modern conception of cancer of the breast and the consequent operation result from perfected knowledge of the associated lymphatics. The greatly improved results of operation for cancer of the stomach have resulted from Cuneo's studies of the lymphatics of the stomach. The poor operative prognosis of cancer of the cervix uteri is known to be due to inability to completely remove extensions into the immediate parametric lymphatic channels.

In conclusion, therefore, it should be borne in mind that correct interpretation

and successful treatment of many pathological processes is dependent upon knowledge of the lymphatics.

The writer wishes to express special indebtedness to "Recent Advances in Physiology and Bio-chemistry," edited by Leonard Hill; to the chapter in Keen's Surgery on "Inflammation" by George Adami; to "Infectious Diseases" by G. H. Roger; to "The Lymphatics" by R. Poirier, B. Cuneo and G. Delamer; to "The Surgical Physiology of the Lymphatic System" by C. H. Mayo.

DISCUSSION.

Dr. Charles Young, Newark.—Mr. President and Gentlemen:—I have little to add to the excellent and suggestive paper of Dr. Hawkes, and nothing to criticise in it. It will have served a most exemplary purpose, if it stimulates many of us to learn what is known of a system that is in process of being discovered; for, fifteen or twenty years ago, the part played by the lymphatic system in the animal economy was not dreamed of. The paper touches upon but few points of consideration. To encompass the whole would greatly encroach upon the time of the Society.

What is the part played by the lymph in the nutrition of tissue? or, rather, what are some of its many functions? Directly after eating, there ensue certain changes in the circulation. Within an hour after a meal, there occurs a distinct rise in the blood-pressure. Then it begins to fall; and when from two and a half to three hours have elapsed, it becomes stationary until the next meal is taken or until exercise is indulged in. There are variations during digestion in the corpuscles, in the hemoglobin, and in the specific gravity of the blood. All these things would seem to show a purpose on the part of nature towards nutrition.

Tissue-lymph is intermittently effused after the ingestion of food, during exercise, and during rest after exercise, as well as during sleep. Oliver, in the *Lancet* three years ago, said that the rapid effusion and removal of tissue in states of rest suggest the probability of a circulation between the blood and the tissue-spaces—a circulation independent of the lymphatic circulation. A selective process takes place, depending upon cell-needs. Tissue-waste is poured into the lymphatic spaces, and is absorbed by the veins and radicles. Hence, the lymphatics are protective, as well as nutritional. The apparent physiological intent of the effusion is reparation, and that of its absorption is the removal of tissue-waste. The lymph is the liquid medium of exchange between the living cells of the body and the blood. The blood comes into contact with the endothelial cells of the blood-circulatory system and with the cells within the spleen-pulp—with these, and with these alone. It seems as if the lymphatic system were especially designed as the protective agency of the body. The lymph-spaces are microscopic, and communicate freely with one another. These empty into the small feeders of the system, the smallest of which are provided with valves, the capillaries being so numerous that the body is absolutely covered. These valves in the capillary vessels materially hinder the current and prevent the absorption of infective material. Four mil-

limeters a second is the average rate of the lymph-stream's current—about .16 in.

The lymph-nodes themselves are particularly fitted to resist invasion. They are situated in the course of the lymphatic vessels. The capsule of the node is mainly composed of white fibrous tissue. From the internal surface of this are little off-shoots, "trabeculae," which extend partly across the node and enmesh a central pulp, composed of leucocytes. This central pulp does not entirely fill the cavity, but leaves a lymph-sinus. The end of the trabeculae are joined by a network of delicate adenoid reticular tissue, continuous, on the one hand, with the trabeculae or capsule; and, on the other, with a still finer network of the same character, which pervades the pulp and forms the framework upon which the pulp is supported. The cells at the periphery of the pulp are in a condition of multiplication by karyokinesis, the newly formed cells being continually liberated into the lymph-sinus, which is the battleground. The texture of the node retards the circulation. The rapid production or evolution of lymph-corpuscles furnishes the resistant army. Pathogenic bacteria enter the body mainly through the lymphatics, after they have overcome the defending army. Halban has proved this. He has also found that some kinds of bacteria will be discovered in the lymph-nodes or lymph-glands much sooner than will others. The *Micrococcus prodigiosus* was found in the inguinal gland a few moments after infection. *Staphylococcus pyogenes aureus* was found there in an hour, and the bacillus of anthrax only after two and a half hours. Halban explains this difference on the theory that the microorganisms are attached with varying energy by the glands. Those energetically destroyed are demonstrable only after they have overcome the resisting power of the glands. Halban shows, furthermore, that the pathogenic organisms are demonstrable in the glands much later than are the nonpathogenic. The more virulent the germ, the more slowly is it susceptible to demonstration. The nodes increase in size until they are able to cope with the microbic invasion. Nonpathogenic bacteria pass the lymphatic glands and are found in the viscera a few minutes after infection. Pathogenic bacteria are demonstrable there only after many hours have elapsed, since they have been observed in the lymph-gland. The lymph-nodes filter out and destroy the bacteria.

There is a relationship between the lymphatics and the true serous membranes. The closed sacs are prodigiously expanded lymph-spaces, which are sometimes, and appropriately, called lymph-chambers. This is another indication of the protective purpose of the lymphatic system. Recognition of the continuity of lymphatic and serous surfaces is of great physiological and pathological importance. The deep lymphatics accompany the blood-vessels. They ultimately end in veins, and so become merely an adjunct to the blood vascular system. Since extension of malignant disease is mainly through the lymphatics, extirpation should be carried at least beyond the outlying chain of lymphatic nodes. A knowledge of the areas drained by the different sets of lymphatic nodes is most helpful in prognosis and treatment. It may be also often most helpful in diagnosis. Certain regions seem to have a selective tendency. Hodgkin's disease, for instance, sometimes makes its presence known in the glands of the neck, sometimes in those of the groin, and sometimes in those of the axilla. According to Troisier,

enlargement of the supra-clavicular glands on the left side of the neck is sometimes an indication of disease of the stomach. Enlarged nodules in the abdominal wall should make one suspicious of malignant disease of some of the contained organs. Enlargement of the occipital, post-cranial or epitrochlear glands often affords strong evidence of syphilis. I am largely indebted for the substance of these remarks to Gerrish's "Anatomy" and "The International Text-book of Surgery."

Dr. Norton L. Wilson, Elizabeth.—I desire to emphasize one point, that is, the enlargement of the gland means bacterial infection. This is true in regard to the cervical glands, whether the superficial or the deep glands, because we not infrequently see these enlarged glands, which have become infected through the diseased tonsils. In fact, I have seen, many times, these glands recede after the tonsils had been properly treated. I want to emphasize this because volumes have been written about the role of scrofula in producing these large glands. They simply mean bacterial infection through the tonsils.

Dr. C. C. Beling, Morris Plains.—I wish to emphasize the fact that the lymphatic glands often yield to other causes than bacterial infection. In a recently treated case of follicular tonsillitis, engrafted upon a chronic enlargement of the posterior cervical glands, these glands reduced considerably in size, upon the subsidence of the tonsillitis. I would also make reference to the enlargement of the lymphatics in the inguinal region. I have seen quite a number of these cases. In one case, of malarial origin, the glands were much enlarged, but did not suppurate. The enlargement was so great as to produce thrombosis in the saphenous vein.

Dr. Gordon K. Dickinson, Jersey City.—I had hoped that something would be said concerning the omentum. Some years back, before the lymphatic system was comprehended, surgeons would pull the omentum well down before closing the abdomen. This organ contains a good deal of adenoid tissue and its endothelium is one variety of connective tissue easily disturbed from its equilibrium. When a pathogenic germ enters the peritoneal cavity the endothelium of the omentum becomes converted into leucocytes, of which there are two types, those which extrude the enzymes which are prohibitive of the germ, and the phagocytes, and when the omentum has sent out sufficient leucocytes to control invasion and the invasion is controlled resolution occurs, being a re-formation of the endothelium from those that remain. There is no organ of the body more important to the surgeon.

One of the gentlemen stated that the glands of the neck enlarge only when invaded by pathogenic germs. The effect of such invasion will depend upon whether that pathogenic germ holds its toxin like the tubercular, or liberates it, as do the cocci. The latter, through chemotaxis, attract the leucocytes to the point of inducing supuration; and the former, having no chemotactic effect, produce simply local hyperplasia as the first result.

Dr. Emery Marvel, Atlantic City.—I wish to express my pleasure in listening to this paper. There is one feature of the subject that is rather new to me. I have always viewed the lymph-channels as being afferent, instead of efferent. The fact that the lymph furnishes nutrition to the cells is interesting. Its being a vehicle for

absorption always seemed the most potent office it performed. While interested in the fact that it contributes in an efferent way to the nutrition of the cells, its office as a vehicle for absorption cannot be overestimated.

Dr. Young has mentioned the time taken in absorbing bacteria. In a recent investigation by Buxton and Torrey, it was shown that bacteria placed within the peritoneal cavity reach the liver through the thoracic duct in fifteen minutes. When we trace the route followed, we cannot but be impressed with the rapidity with which charcoal or lampblack can pass through the omentum to the liver and the spleen through the lymph-channels of the peritoneum. I am deeply interested in the remarks of the last gentleman who discussed this paper, speaking of the two roles the omentum plays; that is, the two functions the phagocytic and the enzymatic. I desire again to express my pleasure in hearing this paper.

Dr. Hawkes, closing.—I was very glad to hear Dr. Dickinson's remarks upon the omentum, and also to have read his recent articles. I wish to thank all the gentlemen for their attention.

A PLEA FOR MORE GENTLE WOUND MANIPULATION.

J. H. BRADSHAW, M. D., Orange.

Every surgeon strives to get his wounds to heal as quickly and as free from constitutional disturbances as possible. To this end he devotes much care in preparing his patient for the operation, in sterilizing his instruments and all his dressings, and in making his hands as aseptic as it is possible to make them. He will spend large sums of money in procuring the most approved aseptic ligatures, that his wound may heal by primary union. But often he will defeat the object for which he strives by simply forgetting how slight a pressure on the edges of his wound will cause bruising, resulting in a superficial injury so slight as not to be visible but yet enough to lower the resistance and provoke sloughing.

It has long been observed that the better the circulation the quicker and better the healing. The less the traumatism the better the chances for primary union. Fewer pus wounds are seen after operations under local anæsthesia than after operations performed after general anæsthesia, because in the former the surgeon is compelled to use the greatest care in wound retraction so not to make the patient cry out with the pain the retraction causes.

It is this violent retraction that is responsible for much pus. When this is escaped the patient is more likely to run a higher temperature curve than one has a right to expect in a clean case. It is in obese patients where the abdominal wound cuts through one or more inches of adipose tissue that the retractor is especially liable to impair the integrity of the circulation. Here we have a tissue that is feebly supplied with blood vessels at best and where even gentle pressure on the fat cells will squeeze out into the wound an oily fluid exudation preventing healing and making the best of culture mediums.

Nor is the retractor the only offender. How often we see a wound *wiped* in a manner that makes one shudder! A rough piece of gauze (and all gauze is rough and can abrade a delicate structure) is rubbed with force into the wound to stop bleeding! The assistant cannot be too careful to gently pounce with his gauze sponge the bleeding

surface. Furthermore, the simple catching of the bleeding artery is a nice manoeuvre that cannot be done too carefully. The greatest pains should be taken to avoid catching little chunks of tissue, for with the exercise of a little care only the bleeding mouth can be included and a mass of sloughing flesh will not impair the healing of the wound.

These points are so elementary that an apology would be called for in their statement if it were not the case that they are being daily disregarded by our best operators and their assistants.

Annual Reports of the County Society Reporters.

FOR THE YEAR ENDING JUNE 1, 1907.

ATLANTIC COUNTY.

To the Chairman of the Committee on Scientific Work:

Regular meetings have been held throughout the year, and good general attendance noted, as well as interest manifest. During the year papers have been read before the Society by Dr. D. J. McCarthy, of Philadelphia, on "Practical Medical Jurisprudence"; Dr. James P. Mann, of Philadelphia, on "Commoner Deformities of Children"; Dr. Walter Reynolds, on "The Therapeutic Use of Adrenalin Ointment in Neuralgic Affections."

No epidemics have been reported throughout the county, although "La Grippe" of mild form and grippal colds were noted as prevalent, bronchitis and tonsilitis accompanying many of these cases.

The Society has lost one of its members through death, Dr. Samuel D. Bickel, and one through removal, Dr. T. Madden.

Five new members have been added to the roll: Drs. A. L. Atherton, Samuel Barbash, J. S. Githens, J. W. Reed and T. D. Taggart.

Probably the most important event in the year's history of the Society is the instituting of post-graduate work. Meetings are to be held bi-monthly, the first being held April 5, 1907. The program for this meeting being: Aetiology and Symptomatology of Croupous Pneumonia, Dr. E. H. Harvey; Physical Diagnosis of Diseases of the Chest, Dr. W. Reynolds; Treatment of Croupous Pneumonia, Dr. P. Marvel; Discussion opened by Dr. Githens.

Respectfully submitted,

A. B. SHIMER, *Reporter.*

Atlantic City, June 1, 1907.

BERGEN COUNTY.

To the Chairman of the Committee on Scientific Work:

As reporter of the Bergen County Medical Society, I beg to submit the following report:

The annual meeting of the Bergen County Medical Society was held in Hackensack, Tuesday, April 9. The following officers were elected to serve during the ensuing year: President, Dr. Alfred W. Ward, Closter; Vice-President, Dr. Edgar K. Conrad, Hackensack; Secretary, Dr. J. W. Proctor, Englewood; Treasurer, Dr. David St. John, Hackensack; Reporter, Dr. Charles W. Harreys, Ridgewood.

Some of the papers read during the year were: "Ingrowing Toe Nail and Its Radical Cure," by Dr. Joseph Payne, of Midland Park, and "Hy-

giene," by Dr. M. J. Sullivan, of Englewood. At the annual meeting in April, Dr. P. A. Harris, of Paterson, entertained the Society with a paper on "The Diagnosis and Treatment of Gall-Stone Disease."

During the past year, in April, May and June, scarlet fever prevailed to a considerable extent in the eastern part of the county. There were many cases of pertussis and measles throughout the county and some diphtheria. Infantile intestinal troubles during the summer months were about as prevalent as is usual for this section.

The winter months were notable for much illness of a general nature. Cases of grippe were numerous, and pneumonia of a mild type prevailed, especially in children. Typhoid has been infrequent.

CHARLES W. HARREYS, *Reporter*.

Ridgewood, N. J., May 17, 1907.

BURLINGTON COUNTY.

To the Chairman of the Committee on Scientific Work:

Since our last report—one year ago—our Society has been steadily growing in membership, attendance and in general interest in its excellent work. Many able and instructive papers have been presented, and fully and intelligently discussed.

A few reform measures have been adopted. Notably those pertaining to contract practice and life insurance examinations, which are highly commendable so far as they go, but which, in the opinion of your reporter, fall far short of full consummation. Let us trust, however, that what has been accomplished along this line is but an earnest of what may be expected in the near future.

The seventy-seventh annual meeting of the Burlington County Medical Society, held at Mount Holly on the ninth day of January last, was signalized by the introduction of the social feature, *viz.*, the wives of the Mount Holly members gave a light tea to the wives of the out-of-town physicians from 4 to 6:30 p. m., furnishing them an opportunity, in a most pleasant manner, of meeting one another. After the transaction of business pertaining to the annual election of officers, a banquet was served, at which the ladies and several prominent gentlemen were the guests of honor. The scholarly address of our President, Dr. Joseph Stokes, of Moorestown, was followed by a number of good speeches and a generally good time. The affair, on every hand, was pronounced a grand success, and it is safe to conjecture that the innovation has come to stay.

On the eighteenth of February we received a visit from Dr. J. N. McCormack, of Kentucky, the representative of the American Medical Association. His eloquent and practical address unfortunately was listened to by rather a small audience, due, undoubtedly, to our failure to give the matter greater publicity. In point of character and appreciation, however, the audience was all the distinguished speaker could have desired. As a result of the doctor's recommendations, the Society has appointed a committee of three to formulate plans for the prosecution of post-graduate instruction.

As to the health conditions of the county during the past year little can be said, as very little has been reported, few responding to the call for material. If, however, the few points heard from

county, then we are forced to the conclusion that nothing out of the ordinary has happened, or else the physicians have been too much occupied to report it.

Dr. W. P. Haines, of Medford, reports a slight epidemic of diphtheria last winter, which claimed for one of its victims a prominent physician of the town, after an illness of but three days. It was of the laryngeal type, and antitoxin was administered within a few hours from the first symptoms.

Dr. A. L. Gordon, of Burlington, reports a slight increase of typhoid fever over last year. Dr. Adams, of Beverly, reports a light epidemic of diphtheria, readily controlled by the prompt use of antitoxin and active disinfection, also considerable whooping cough. Dr. Tracy, also of Beverly, notes a peculiarity about the several cases of diphtheria occurring in his town, that they all appeared within one week. Whooping cough has prevailed since early fall; also chickenpox and la grippe.

Dr. Shipps, of Bordentown, reports considerable la grippe, but almost no typhoid fever, which he ascribes to the new water supply. He recalls no case of special interest, except one of anterior poliomyelitis in a vigorous male patient of three and one-half years, the parts affected being the muscles of the right arm and left leg. The child rapidly improved under the use of electro-massage and the administration of strychnine and dilute phosphoric acid. Dr. Marcy, Jr., of Riverton, has recently had an alarming run of criminal abortions in a number of very respectable families, one a clergyman's. He feels that it is a very serious condition of affairs, and greatly on the increase. He suggests that our County Societies should take drastic measures to bring the guilty parties to justice.

Nothing unusual has occurred in Mount Holly. We have had the usual run of seasonable diseases, but nothing approximating an epidemic has occurred during the entire year. It occurs to me, however, to mention a few cases of some interest occurring at Smithville. The first was a case of pronounced hemophilia—the patient, a farmer fifty-two years old, the youngest of five brothers, three of them bleeders, was slashed across the side of the face and ear by a frenzied drunken man, an employee of the patient, on the thirtieth of January last. Without taking time to detail the treatment employed, suffice it to say, every known expedient, surgical and therapeutic, was resorted to without the slightest avail, and, finally, the patient, becoming exsanguinated and exhausted, we were compelled to have recourse to digital compression by a relay of nurses and attendants, doing twenty and thirty minute turns, more or less persistently for forty-eight hours. This treatment had the desired effect, and the patient ultimately made a good recovery. The other cases (for there were four of a kind) were ptomaine poisoning—three adults and a young girl. Shortly after eating freely of potpie containing beef, potatoes, hard-boiled eggs and milk, they were taken with symptoms of cholera morbus, agonizing pains in the stomach, nausea, vomiting and purging. Two little children who did not partake of the pie escaped punishment. The milk had been obtained from a near-by farmer, and no other person had suffered from its use. The meat was several days' old and probably tainted. In the course of a few days all recovered.

We have lost one member of our Society during the past year. Dr. I. D. Young, of Bordentown,

who, after a brief illness, passed away on the twentieth of April, at the mature age of eighty years. He had been in active practice in Bordentown for fifty-eight years, and had a record of over thirty-five hundred obstetric cases which he had attended. Both as a citizen of the town and a physician, the doctor was always classed as a man of the highest character. He was a man of most genial disposition and of more than ordinary intelligence.

Respectfully submitted,
W. P. MELCHER, *Reporter.*

CAMDEN COUNTY.

To the Chairman of the Committee on Scientific Work:

The Camden County Medical Society closed its sixtieth year with seventy-nine active members and seven honorary members, Dr. Joel Fithian having been its honored president. During the year six new members were added, and two removed by death—Dr. O. B. Gross and Dr. Charles Wetton.

One of the Society's members, Dr. H. Genet Taylor was made, on one occasion, the honored guest of the Society. Dr. D. Strock was made a member of the National Legislative Committee. The Society endorsed the action of the Medical Council of the A. M. A., and pledged its support and aid to secure the passage of a bill to provide for a department of Public Health, with representation in the Cabinet.

The following sections were appointed for the year: Section on Sanitary Science, Dr. Paul N. Litchfield, chairman; Section on Obstetrics, Dr. Emma Richardson, chairman; Section on Pathology and Microscopy, Dr. Levi B. Hurst, chairman; Section on Practice of Medicine, Dr. W. B. Jennings, chairman; Section on Surgery, Dr. A. S. Ross, chairman; section on Gynecology, Dr. J. S. Nicholson, chairman.

These various sections reported during the year, either through the reading of papers or report of interesting cases. Dr. Joseph S. Baer gave a paper on "Fibroid Tumors Complicating Pregnancy"; Dr. E. B. Rogers, paper on "The Importance of Frequent Examination of the Urine." Dr. Frank N. Robinson gave an informal talk on "The Pathology of the Tubercle"; Dr. A. S. Ross, paper on "Tetanus." Discussion upon this subject pointed to the acceptance of antitoxin as a remedy of value, both as a prophylactic and curative, but must be used early and freely. Dr. George E. Shoemaker, of Philadelphia, read a paper on "Conditions Found in the Genito-Urinary Canal of the Female." This paper was illustrated by photographs. Dr. John H. Chein, of Philadelphia, gave a paper on "The Treatment of Arthritis Deformans." Dr. H. Nicholson reported a case of "Strangulation of the Intestine by a Band of Adhesion."

On February 19th last, Dr. J. N. McCormack, of Bowling Green, Ky., visited the Society as an official of the A. M. A., and as in other places, he here addressed the Society members in the afternoon, and in the evening the general public at a meeting which was largely attended and participated in by several of our leading citizens. In compliance with Dr. McCormack's suggestions, a committee was appointed by President Fithian to investigate the merits of the suggestion to open a post-graduate course of instruction, and at this writing the course has been launched and promises success.

The general health of Camden City is still good; typhoid fever continues to be a rarity with us, save as brought to us from other places, Philadelphia still occupying the unenviable position as our principal source of supply. Other infectious diseases have prevailed, particularly during the latter winter and spring months, with scarlet fever and diphtheria more prevalent than for several previous years. La grippe visited us throughout the county, but on the whole of rather a mixed type; pneumonia occurred not infrequently as a sequela.

For Haddonfield, Dr. John H. Stevenson reports: "The health of Haddonfield, and its environs, during the past year has been an average one. There have been no epidemics. La grippe, in a mild form, was quite common during the last of the winter and was frequently followed by pneumonia, which was quite tractable. Rheumatism, which last year was very prevalent, was often met with this season, but usually was subacute in its attacks. There have been a few sporadic cases of scarlatina and typhoid fever; one case of the latter in this town, in a child, was clearly traced to its having drank water from a pond upon which it was skating, and into the sources of which a few houses are drained. Malarial fevers are uncommon here, quite in contrast to what it was prior to a third of a century ago. The theory of its origin was then that the source of this disease was in the soil; although since that time the mosquito has been found to be the great transmitter of it. Dr. Charles S. Braddock, Jr., a native of and former practitioner in Haddonfield, and member of our Society, returned on April 19th from a four years' sojourn in Siam, where he became the leading medical authority with unbounded opportunity for studying malarial fever, which is very common and severe in that tropical country. His experience has forced upon him the belief that while the mosquito is a potent factor in its development, that its origin is in the soil which is protected from the sun's rays, especially soluble in water, and, that in Siam, the avoidance of the shade of the jungle, and the drinking of all surface waters, unless boiled, are a much safer protection from fever than the mosquito net."

For Merchantville, Dr. John W. Marcy reports: "There has been nothing special during the past year. The two most interesting cases I have had were a case of multiple neuritis which has lasted since last October, and is still at it, refusing to yield to all treatment, and a case of meningitis in a child of six years, who was unconscious for two weeks, but recovered. Of tuberculosis, I have seen two cases that were out of the ordinary. One, on account of its virulency, only lasted two months, and ran a temperature from 103 to 105 degrees. The other was a case of laryngeal tuberculosis, in which there was ulceration about the teeth and mouth which I believe is unusual."

For Cooper Hospital, the Secretary reports as follows:

In wards, January 1, 1906	48
Admitted during 1906	1,052
	I,100
Discharged cured	735
Discharged improved	150
Discharged not improved	10
Left without permission	20
Died	140
In wards January 1, 1907.....	45
	I,100

Died within 48 hours and hopeless when admitted 67
 Average stay of each patient, 16¼ days.
 Total number of days' treatments..... 16,990

OUR PATIENT DEPARTMENTS.

	New.	Revisits.	Total.
Surgical	2,828	10,449	13,272
Medical	1,600	2,196	3,796
Gynecological	153	845	1,003
Eye	283	745	1,028
Nose and Throat.....	209	970	1,179
	5,073	15,205	20,278

For Camden City Dispensary, Dr. Pratt reports as a summary:

Cases treated at the Dispensary.....	1,372
Cases treated at residences.....	266
Total cases treated	1,638
Number of visits to the Dispensary.....	1,962
Number of visits to residences.....	1,142
Total number of visits	3,104
Of this number, teeth extracted.....	48
Persons vaccinated	129

Out of the usual, and of more than ordinary interest, I submit a brief report from Dr. Braddock, which is self-explanatory, furnished me by Dr. John R. Stevenson:

"In answer to your note would say that the Siamese Kingdom extends from 2 degrees to 22 degrees north latitude, and that there are several races inhabiting it. Malays in the Malay Peninsula, Siamese in the Peninsula, Chinese and Siamese in the central part, and Laos and Karens, with a few Burmese, in the north.

"Officially, I was first in charge of the Royal Vaccine and Bacteriological Laboratory, and with Dr. H. Adamsen made the first "Bovine Smallpox Vaccine" ever made in Siam, after the German and Japanese doctors had tried and failed, owing to climatic and other conditions.

"By Government Vaccinators, vaccinating 400,000 people in two years, and cutting the death rate from 10,000 on the year of my arrival, to practically nothing. The work now going on at the rate of about 150,000 yearly. Over a year ago I was made Chief Medical Inspector of the country. I drew up and formulated in outline the first sanitary law for the kingdom, and which applies to 8,000,000 people. Wrote pamphlets on plague, beriberi, cholera, malarial fever, dysentery, vaccination, tuberculosis, syphilis, 'Care of the Mother,' 'Care of the Child,' 'Smallpox,' and 'First Aid to the Injured,' which were at once translated into Siamese, printed by the Government Press, and issued to the people by hundreds of thousands of copies. The first books on modern medicine in the Siamese language, with the exception of two text-books used only in the medical school at Bangkok.

"Fought through two epidemics of Asiatic Cholera, and one of Bubonic Plague. Have personally attended over 1,000 cases of cholera and nearly 200 of bubonic plague. Traveled nearly 5,000 miles in the jungle and around the Malay Peninsula last year, and have seen more of this territory than any white man living. Owing to my representations, backed by letters from Dr. E. L. B. Godfrey, of Camden, the Government is now putting down artesian wells all over the country, thus cutting down the death rate from Asiatic Cholera. I introduced American cotton all over the country. It requires nine months for Siamese cotton to mature.

"Traveled on official expeditions with H. R. H. Prince Damrong; one to the Malay Peninsula, crossing by two different mountain passes with 65 elephants, 400 porters or carriers, and 50 Malay spearmen as an escort. Another to the Indo-Chinese frontier, 60 days by horse and elephant, traveling 1,200 miles with 50 horsemen, 15 elephants, 400 porters, and 100 bullock carts; another to Pechabun Province in the North, with 50 horsemen and 200 porters, coming down the Nam Skat, an unsurveyed river 500 miles, the second white man ever to do so, and traveling 14 days in a boat dug out of a solid log. Besides traveling hundreds of miles by boat and elephant, stamping out cholera and plague.

"Owing to my representations to the Siamese Government, showing the great loss of life from preventable diseases, the medical and hospital systems of the country were entirely reorganized, and I was placed in entire charge with title of Chief Medical Inspector, with 8,000,000 people and 250,000 square miles of territory to look after. Owing to the great amount of work, the great hardship in traveling (I killed four horses on the last trip), the great nervous strain in personally fighting plague and cholera (twice I was infected with cholera after attending patients), and the work done for weeks in a tropical temperature, often running to 140 degrees Fahrenheit, my health broke down entirely and I was forced to leave the country to save my life. The Government, in recognition of my work, has awarded me the decoration of the order of 'The White Elephant,' an order which few foreigners possess, and which will be sent to me through the State Department.

"The Government is busily engaged at present in opening up the country by means of good roads, railroads and canals. Chas. S. Braddock.

Respectfully submitted,

EZRA B. SHARP, *Reporter.*

ESSEX COUNTY.

To the Chairman of the Committee on Scientific Work:

The Essex County Medical Society has held during the past year the following meetings: February 1st, addressed by Dr. J. N. McCormack in the interest of the American Medical Association; February 19th, paper on "Pancreatitis," by Dr. J. H. Musser; March 19th, paper on "Acute Gastric Hemorrhage," by Dr. A. J. McCosh; April 2nd, annual meeting with reports and election of officers and new members. In addition, a meeting was called for January 15th, with Dr. William M. Polk for speaker, but illness prevented his appearing, and the meeting was called off.

At the annual meeting, April 2nd, 1907, 214 members registered attendance; 14 new members were elected. Three members died during the year: Dr. C. R. Pettinger, Dr. D. M. Skinner and Dr. M. T. Gaffney. Obituary notices have already been published in the JOURNAL, August 1905, May, 1906, and November, 1906. The revised Article of By-Laws on membership provides that "any practitioner of medicine of approved moral and professional reputation who holds the degree of M. D. from the Medical Society of New Jersey, or a reputable medical college, and who has conformed to the laws of the State regulating the practice of medicine, and to the rules of the Medical Society of New Jersey, shall be eligible to membership in this Society." The Council reported a communication from the State Society, and their reply on the inquiries made were as follows: (1) Public

meetings we were already providing in the scientific meetings now held. (2) Exchange of papers between County Societies they approved. (3) Courses of medical lectures and clinical meetings to furnish post-graduate advantages, they did not recommend. (4) Contract work our Society had already opposed by resolution a year ago. (5) On insurance fees, the action of the State Society in opposing the "cheap schedule" was endorsed. (6) A roll of all licensed practitioners in the county, we had already provided and sent to the American Medical Directory. A resolution, opposing the "Osteopath's Bill," was carried. A motion of approval of Dr. Albert Wickman's sturdy and successful fight against a mal-practice suit was passed. The address of the President, Dr. Archibald Mercer, was on the subject of "Public Hygiene" and will be published in the JOURNAL. The following were elected annual delegates to the State convention: Doctors Disbrow, Bradshaw, Clark, Cook, Condon, Becker, Davenport, Emerson, Eagleton and Epstein, and the following officers were elected for the ensuing year: President, Dr. H. C. Bleyle; Vice-President, Dr. W. P. Eagleton; Secretary, Dr. R. H. Hunt; Treasurer, Dr. C. D. Bennett; Reporter, Dr. F. W. Pinneo; Councilors for three years, Dr. S. E. Robertson, Dr. F. C. Webner; for two years, Dr. Charles Young.

Last year we reported the founding of the "Medical Library Association of Newark, N. J." During the year its growth was steady and its progress most gratifying; 142 members were on the roll in good standing, one a life member; \$502.00 was received from members, and a balance of \$120.65 was on hand. The coöperation of the Free Public Library was perfect. The second year begins with 43 current periodicals, American and foreign, and 750 volumes on the shelves. The results achieved have been by the very moderate annual fee of \$3.00 and a few gifts of books, without waiting for any large endowments. As an institution, it has come to occupy a manifest place of usefulness which will grow as it becomes better known to a larger number. An interesting fact is the awakening of medical library activities everywhere. In New Jersey this year has brought forth efforts like this of Essex, in Hudson, Sussex and Mercer counties, and Passaic has a good nucleus in the medical books in the Public Library at Paterson. The William Pierson Medical Library Association of Orange has maintained its uniform and successful plan of monthly meetings with a paper by some visiting authority and discussion by members. January 8th Dr. William Leland Stowell, of New York, lectured on "Blood Pressure and Its Relation to Therapeutics"; February 12th Dr. George Emerson Brewer, of New York, on "Diagnosis and Treatment of Certain Unilateral Infections of the Kidneys"; March 12th Dr. John R. Shannon, of New York, on "Errors of the Refraction and Balance of the Eyes and Their Influence on General Health"; April 9th Dr. Sinclair Tousey, of New York, on the "Ultra-Violet Ray and High Frequency Currents in Diagnosis and Therapy." On May 14th they held a clinical meeting, with exhibition and discussion of cases of Heart Block, Manipulative Treatment of Synovitis, Dilatation of Caecum, and others. They are under obligations to Miss Pierson for new decorations and furnishings in their room at the Stickler Memorial Library.

The members of the Practitioners' Society of the Oranges have made and signed a joint agreement not to engage in any contract work.

The Society for Relief of Widows and Orphans of Medical Men of New Jersey held its twenty-fifth annual meeting in Newark, Tuesday evening, May 14th. The reports were very satisfactory. The permanent fund now amounts to \$6,843. The payment to the estate of a deceased member amounts to about \$235. There are 316 members, a net increase of 14 for the year, 21 having been elected; 4 died and three lapsed. Deaths: G. W. Bartow, of Three Bridges; D. M. Skinner, of Belleville; O. A. Weigand, of Jersey City, and A. M. Mills, of Newark. The officers are: Chas. J. Kip, President; Archibald Mercer, Vice-President; Chas. D. Bennett, Secretary; Geo. R. Kent, Treasurer. The death of Dr. Skinner removes a trustee of many years' work and interest in the Society. G. K. Dickinson, of Jersey City, was elected to his place. The worthy work of this Society would spread, as it ought, if it were more advertised among the State Society members. In every county it ought to be better known. Its great beneficence to the family of a Doctor who dies would appeal to hundreds who are now unfamiliar with its benefits. Every county but two—Atlantic and Cape May—is represented on its roll. Its membership in every county ought to be largely increased.

The New Jersey Association for the Prevention and Relief of Tuberculosis held its annual meeting May 22nd at Newark under the auspices of the local committee. Among the new officers elected are the following physicians: G. K. Dickinson, of Jersey City, President; Wm. G. Schaeffer, of Lakewood, Vice-President; Theo. W. Corwin, of Newark, and Wm. H. Murray, of Plainfield, are on the Executive Committee; I. E. Gluckman, of Newark; Wm. Elmer, of Trenton; H. P. McAlpin, of Morris Plains, and N. L. Wilson, of Elizabeth, are on the Board of Directors. At the public meeting Dr. Lawrence F. Flick, of Philadelphia, made an address on "Consumption and Its Prevention," which was designed to give laymen an adequate and practical view of the white plague and the importance of personal and public hygiene in its prevention.

Our medical societies have had their usual meetings. Two, both of Newark, deserve special mention. The Medical League has had public meetings with visiting speakers, as Dr. Abraham Jacobi, of New York, invitations to which were widely accepted, showing the profession's appreciation of broad-minded efforts along advance lines. The Doctors' Club is one of the newest in the field and represents the work, scientific and social, of some of the younger men.

We have felt great sympathy for one of our good men, Dr. Floy McEwen, of Newark, in his forced absence in Texas for change of climate on account of his health. We shall hope for his return in due time greatly improved and in good cheer.

The Milk Commission, of which Essex County is justly proud, is about to be heard in a field yet broader than heretofore. Dr. H. L. Coit has, with the coöperation of twenty-five or more milk commissions throughout the whole nation, planned a convention for June 3d at Atlantic City, just prior to the A. M. A. convention, at which the whole subject concerned will be discussed in all of its manifold phases and a national organization effected to harmonize the aims, requirements and standards for "Certified Milk." The good already done, not only in the prophylaxis and cure of disease, but in the purifying of the most important single article of food for the whole population,

will no doubt be multiplied by as much as the nation is greater than any locality.

Emboldened by the favor with which a former suggestion (regarding time needed by a Reporter after his appointment before making his annual report) was received by you, the writer would call attention to the advantage of some plan for calling out, by circular, useful items of scientific work or medical news from individuals or institutions. Would not a conference of Reporters and county officers with the editor of the JOURNAL at the State Convention be helpful to all interests concerned? Again, the Necrology Committee of the County Society might well forward its obituary notice for publication in the JOURNAL promptly after death of the member, and not wait for the annual meeting of the County Society to make one report for the year, when such a notice might be a year old!

Respectfully submitted,
FRANK W. PINNEO, *Reporter*.

GLOUCESTER COUNTY.

To the Chairman of the Committee on Scientific Work:

The Gloucester County Medical Society has held five regular meetings during the year, which have been well attended and of increasing interest. There has been a growing tendency among the members to present reports and abstracts. Among those of note may be mentioned one by Dr. H. B. Diverty, upon "Pneumonia," and by Dr. Charles S. Heritage upon "Anaesthesia."

Very instructive papers by Drs. Swithin Chandler, of Philadelphia, on "Vaginal Tears During Labor and an Operation for Their Repair"; Thomas G. Ashton, of Philadelphia, on "Some Points in Physical Diagnosis with Especial Reference to Pneumonia"; W. J. Roe, of Philadelphia, on "Ankylosis of the Temporo-maxillary Articulation Due to Fracture, Occurring Usually in Early Life," and E. L. B. Godfrey, of Camden, on "The Climate of Southern California," were read before the Society.

On February 20th the Society entertained Dr. McCormack, of Kentucky, who spoke to the medical profession of the county in the afternoon and at a mass meeting of citizens in the opera house in the evening. His lecture was appreciated by a representative audience, and the Society has appointed a committee to formulate plans to carry into effect his recommendation as to post-graduate work.

La grippe, pneumonia, pertussis, tonsillitis, parotitis, measles, scarlatina and varicella have been prevalent during the year, but there have been no severe epidemics, most of the cases being of a mild type.

The Society has been called upon to mourn with Dr. James C. McClure in the death of his wife, which occurred in December, 1906, and Dr. George C. Laws, whose wife died in the University Hospital, Philadelphia, in January, 1907.

Respectfully submitted,
HOWARD A. WILSON, *Reporter*.

Woodbury, N. J., May 21, 1907.

MERCER COUNTY.

To the Chairman of the Committee on Scientific Work:

During the past year the Mercer County Component Medical Society has transacted some very

important business. At the meeting, held in July, 1906, the position of railroad surgeon was condemned by some of the members as being equivalent to contract practice in its worst form, the members feeling that the railroad companies should be compelled to pay the same price as individuals for service rendered them in accidents and injuries to their employees and passengers. By vote of the members, an amendment was made to the By-Laws whereby the railroad surgeon was included among the list of doctors who would not be allowed to do contract work.

Our next meeting was held at the Trenton House, November, 1906. It was the evening of our annual dinner, and the occasion was a grand success. Dr. J. Chalmers Da Costa was scheduled to address the Society on "Tuberculosis of the Bones," but was unable to be present; Dr. Jas. K. Young ably filled his position. Toasts were responded to by a number of the members, and the feeling of good-fellowship was greatly strengthened among our local practitioners.

At the December, 1906, meeting a communication from the Kentucky State Medical Society was received, regarding fees for medical examinations for insurance companies. The Society heartily approved of the \$5.00 fee as the minimum price for each examination and adopted the resolution accordingly.

The January, 1907, meeting was very well attended and the members thoroughly enjoyed a paper, entitled "Cancers," read by Dr. H. B. Costill; the paper was also ably discussed by a number of the members present. Dr. D. F. Weeks offered a set of resolutions whereby it would be non-ethical for a physician's name to appear in the daily papers in connection with any surgical or medical case, and if an article did appear in the public press the party or parties connected with the case would be expected to give an explanation as to his responsibility for the same, this explanation to be given before the Medical Society at its regular meeting.

The February meeting was the event of Dr. J. N. McCormack's address to the members of the Society. Dr. McCormack recommended a more thorough organization of our Society and suggested the introduction of a post-graduate course to be followed by the members of our local Society. Owing to many other important affairs occurring on the evening when Dr. McCormack was to address the public, the event was postponed to a later date.

The program for the March meeting was an interesting and instructive paper on "Eye Symptoms in Diseases of the Sinuses," rendered by Dr. C. F. Adams; another interesting paper was read by Dr. George Moore on a case of Tubercular Pyo-pneumo-thorax.

At the April meeting resolutions were adopted condemning Senate Bill No. 469 and a copy of the resolution bearing the local physicians' names was sent to the Senator and Assemblymen from Mercer County. Papers were also read by Drs. Cort, MacKenzie and Hawk on Appendicitis from a medical, surgical and gynecological aspect respectively. Later in the month a special meeting of the Society was held for the purpose of making arrangements to attend the funeral of one of our oldest members, Dr. Elmer Rogers. Dr. Rogers died suddenly during April with angina pectoris. The Society decided to attend the funeral in a body.

A committee was also appointed to draft reso-

lutions on the unexpected and unfortunate death of Dr. Rogers.

Respectfully submitted,
CHAS. H. MITCHELL, *Reporter*.

OCEAN COUNTY.

To the Chairman of the Committee on Scientific Work:

The Reporter of the Ocean County Medical Society begs leave to submit the following report.

The Society held its annual meeting at Lakewood in October, at which the following officers were elected: President, Dr. Ralph R. Jones, Toms River; Vice-President, Dr. C. M. Disbrow, Lakewood; Secretary, Dr. Alex. M. Heron, Lakewood; Treasurer, Dr. Harold Pettis, Lakewood; annual delegate to the State Society, Dr. R. L. Disbrow, Toms River; Reporter, Dr. W. G. Schaufler.

The spring meeting was held at Toms River in April. The membership of the Society remains the same, but the Reporter regrets to say that very little work is accomplished of a literary or scientific nature. The fact that the members are widely scattered through the county makes it unusually difficult to get them together for meetings. Owing to this fact, too, it was found impossible to arrange for Dr. McCormack's visit to Ocean County, as he would have had too small an audience to make it worth while.

Respectfully submitted,
W. G. SCHAUFFLER, *Reporter*.

Lakewood, N. J., May 15, 1907.

PASSAIC COUNTY.

To the Chairman of the Committee on Scientific Work:

During the past year the Passaic County Medical Society has held eight regular meetings, in the course of which a number of interesting papers have been read, and some lively discussions brought out. Among the best were: The recent epidemic of haemorrhagic typhoid at North Paterson, by Dr. G. E. Tuers; Glenard's disease, or Splanchnotosis, by Dr. J. J. Sullivan; Gall-bladder disease, by Dr. P. A. Harris; Edebohl's operation for nephritis, and report of a case with autopsy, by Dr. F. R. Sandt; and one on the therapeutic value of the X-ray in malignant disease, by Dr. J. C. McCoy. Each of these papers occasioned a very full and illuminating discussion.

Among other matters which have been considered by the Society are the perennial osteopathic bill, the question of lodge practice, and the question of establishing a library in permanent quarters. In regard to the first of these subjects, our Legislative Committee was more successful than ever before, having secured our Senator and entire Assembly delegation in opposition to the bill. On lodge practice no action has been taken, and it was decided not to establish a library at present, on account of the expense. The Secretary has received numerous communications, especially from Kentucky, on life insurance fees, a few of which he has read to the Society, with the result that he was directed by unanimous vote of the Society to file in the waste-basket at once any further communications from the Kentucky Medical Society, or from any one else on this subject. This he has faithfully done ever since.

The membership of the Society shows a net gain of four during the past year, six new members having been elected, and two having been

dropped. We kept no delinquent members on our rolls; any member in arrears for dues at the end of the fiscal year is dropped forthwith. Our total membership is now ninety, thus entitling us to an additional annual delegate.

In place of our May meeting the Society revived an old custom, long fallen into abeyance, of having an annual dinner. The dinner was held at the Hamilton Club, Paterson, about seventy persons being present, and was in every way a successful affair.

The following officers have been elected for the year 1907-08: President, Dr. John T. Gillson; Vice-President, Dr. Bryan C. Magennis; Treasurer, Dr. George Edward Tuers; Secretary, Dr. Elias J. Marsh, Jr.; Reporter, Dr. E. Lucas Henion.

Respectfully submitted,
E. LUCAS HENION, *Reporter*.

Paterson, N. J., May 23, 1907.

SALEM COUNTY.

To the Chairman of the Committee on Scientific Work:

This Society held three meetings during the year. On November 7, 1906, Dr. Henry Chavanne read a paper, entitled "Cystitis, the Predisposing Causes, Errors of American Civilization," which was followed by a lengthy discussion. No epidemics were reported at this meeting.

On February 6, 1907, Dr. Philip Marvel, of Atlantic County, District Councilor, met with us and instructed us relative to the offices of the State Society and informed us that Dr. J. N. McCormack would be with us on the 22d day of February and talk on organization. Dr. Marvel read a paper on State and County Societies and their effect on the public when properly conducted.

Dr. J. N. McCormack was received on February 22d very favorably and entertained a good-sized audience with a very instructive address.

At the February meeting Dr. Charles Duffield, who was educated as a Homeopath, was elected a member of our Society.

May 1st, 1907, Dr. Harris, of Canton, an Eclectic, read a paper, entitled Acute Pneumonitis, from his own school standpoint and personal conviction, which proved very interesting. Being the annual meeting, the officers of the Society were elected for the ensuing year. Dr. W. T. Hilliard, a Homeopath, was elected a member of the Society, making a total membership of 21.

We have profited by the visit of Dr. McCormack in adopting the university extension course of post-graduate study, meeting fortnightly, and we find it valuable and interesting.

No general epidemic has been reported during the year.

Respectfully submitted,
LESTER H. HAMMEL, *Reporter*.

Salem, N. J., May 21, 1907.

SUSSEX COUNTY.

To the Chairman of the Committee on Scientific Work:

The Medical Society of Sussex County held its annual meeting at the Cochran House, Newton, on May 20th. The meeting was a very interesting one and fairly well attended. The members present reported that there had been an unusual amount of sickness prevalent during the past year, but no severe epidemics and no increase in mortality. Dr. Thomas W. Harvey, Councilor for

the First District, was present and took part in the discussions of the meeting. He presented a very interesting history and also report of the autopsy of a case of dilatation of the cæcum, probably caused by trauma. A paper was read by the President, Dr. M. D. Hughes, on "Some Functional Diseases of the Liver (so-called)." The paper was a very interesting and practical one, and was followed by an animated discussion. Dr. Godfrey Roger Pisek, of New York City, read a very able and interesting paper on the "Significance of Abnormal Stools in Early Life." By request of the Society, this paper was published in our State Society JOURNAL. This was followed by a very interesting historical paper, read by Dr. Joseph H. Hunt, an honorary member of our Society, on the "Life and Works of Carl von Linne (Linnaeus)." This paper was listened to with great attention, not only for its historical interest, but for its high literary ability. The Society expressed its appreciation of these papers by a vote of thanks to the authors of them.

No member of the Society died during the present year. Three new members have been admitted this year. Dr. E. Morrison, of Newton, was elected annual delegate to the State Society. Altogether, this meeting was one of the best and most interesting that had been held in this county for many years.

H. D. VAN GAASBEEK, *Reporter*.

Sussex, N. J., May 24, 1907.

UNION COUNTY.

To the Chairman of the Committee on Scientific Work:

The Union County Medical Society during the past year has elected five new members, lost one member by death, and three have been suspended for non-payment of dues.

Four regular meetings have been held, three at the Elizabeth General Hospital, and one at the Plainfield Y. M. C. A. rooms. Three special meetings have been held during the year, the first at the time of the death of Dr. W. U. Selover, when appropriate resolutions were passed and copies sent to his family and to the papers. The second was called for the purpose of making arrangements for the visit of Dr. McCormack from the American Medical Association. The meeting at which the doctor addressed the members and laity was most interesting and profitable to those who attended. Dr. McCormack is a man who has had wide experience and is a most eloquent and forceful speaker, one to whom we all were delighted to listen. We trust that much good may result from his instructive talk. The third special meeting was held for the purpose of sending a delegation to Trenton at the time of the introduction of the Osteopathic Bill. A number of our members responded to the call and went before the committee, joining in the fight with members from other parts of the State, thus helping to bring about the happy result so well known to all. To these men we should be extremely grateful.

Several excellent papers have been read at the regular meetings. Dr. J. P. Reilly read a very interesting and instructive paper, entitled "Diseases of the Gall-bladder and Their Treatment," which received a most generous discussion. Dr. F. H. Pierson read a paper on the "Diagnosis of Appendicitis," in which he entered into the anatomy of the organ, together with the pathology and

symptomatology of its diseased condition. This paper was most thorough in its treatment of the subject.

At the annual meeting the retiring President, Dr. T. E. Dolan, read an extremely interesting paper on the subject "Foods," in which he discussed both chemistry and physiology.

A number of interesting cases have been presented or reported during our various meetings. Dr. B. Van D. Hedges presented a case of extensive compound depressed fracture of the skull in the treatment of which he had excellent results, showing what can be accomplished in these cases by immediate operation. Dr. J. H. Carman presented a case of epithelioma of the face, which was particularly resistant to both X-ray and high frequency current. Operation in this case had been refused. Dr. Victor Mravlag presented to the Society a case of Cirrhosis of the Liver, in which he had, after severalappings of the abdomen, performed Talma's operation, with splendid results. The patient was operated upon May 14, 1906, at which time the typical atrophic "hob-nail" liver was found with a large amount of ascetic fluid in the peritoneal cavity. After the operation tapping was again necessary and this was done fourteen times, the last on July 15, 1906, since which time there has been no re-accumulation of the fluid. The patient since operation has gained twenty-seven pounds, eats well, sleeps well, and is attending to his daily work. In a series of four cases operated upon by the doctor, this is the first successful one.

Dr. Mravlag reported a case of double ectopic gestation in which both tubes were removed; also a case of probable super-fecundation. The patient had suffered from an abortion at three and a half months with passage of fetus and placenta which was followed the next day by the discharge of a perfect three weeks' ovum with sac intact. This is surely a rare phenomenon and worthy of note.

We cannot help but feel that the meetings of our Society are becoming more interesting, and that more good is resulting during each year of its existence.

The usual amount of scarlet fever, measles and whooping cough occurred and more than usual amount of diphtheria.

M. A. SHANGLE, M. D., *Reporter*.

Elizabeth, N. J., May 22, 1907.

QUARTERLY MEETINGS.

CUMBERLAND COUNTY.

Stacy M. Wilson, Reporter.

The Cumberland County Medical Society's Quarterly Meeting was held at the Weatherly House, Millville, N. J., on the afternoon of July 9th. The meeting was called to order and presided over by the President, Dr. E. S. Corsen, who had sent out a circular letter to all practising physicians of the county, both the members of and those not connected with the Society, inviting them to be present. An enormously large attendance was the result, there being several gentlemen present who were not members of the Society. As visiting members or delegates from Gloucester County there were Drs. C. F. Fisler and Charles S. Heritage.

The July meeting of this Society is entirely devoted to the subject of business, and such questions as pertain to the general good of the profession, and the various papers and discus-

sions, were chiefly confined to the same. The following gentlemen read papers, viz., Dr. W. P. Glendon, on "The Transportation Problem"; Dr. H. G. Miller, "Best Method for Purchase of Supplies"; Dr. S. M. Wilson, "Best Method for Collection of Fees"; Dr. J. H. Morse, "Report on A. M. A. Meeting"; Dr. A. J. Mander, "Report on State Medical Society of New Jersey." General discussion was had regarding the various subjects, especially concerning the collection of fees, and the protection of the profession against the wiles of the non-paying element, the general sentiment being that coöperation is the only successful means of protection.

The next semi-annual meeting in October is to be held at the City Hotel, Bridgeton.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The thirty ninth annual meeting of this Society was the most successful in point of attendance and general interest ever held. The rapid increase in membership is an assurance that in the future the meetings of the American Medical Editors' Association will be an important feature annually. Sixty-four new members were elected as follows:

Hills Cole, New York, *North American Journal of Homeopathy*; L. H. South, Bowling Green, Ky., *Kentucky Medical Journal*; J. Elsner, Denver, Colo., *Colorado Medical Journal*; W. L. Dickinson, Saginaw, Mich., *Journal of Physical Therapy*; F. A. B. Fest, New Mexico, *Journal of Physical Therapy*; F. H. Garrison, Washington, D. C., *Index Medicus*; R. Fletcher, Washington, D. C., *Index Medicus*; H. G. Goldberg, Philadelphia, Pa., *Annals of Ophthalmology*; John Guttman, New York City, *Ophthalmology*; L. J. Hirschman, Detroit, Mich., *Harper Hospital Bulletin*; R. J. Held, New York City, *Medical Review of Reviews*; W. F. Honan, New York City, *Journal of Surgery, Gynecology and Obstetrics*; R. H. sayre, New York City, *Sajous Cyclopaedia of Medicine*; P. W. Shedd, New York City, *North American Journal of Homeopathy*; B. L. Simmons, Greenville, Tenn., *Electricism*; T. A. Stevens, Caney, Kan., *Oklahoma Medical News Journal*; J. A. Wilson, Philadelphia, Pa., *American Journal of Orthopedic Surgery*; DeW. G. Wilson, Buffalo, N. Y., *Cleveland Medical and Surgical Reporter*; T. W. White, Philadelphia, Pa., *Annals of Surgery*; O. C. Welbourn, Los Angeles, *Los Angeles Journal of Eclectic Medicine*; J. E. Weeks, New York City, *The Ophthalmic Record*; L. G. Robinovitch, New York City, *The Journal of Mental Pathology*; Curran Pope, Louisville, Ky., *Journal of Advanced Therapeutics*; E. S. McKee, Cincinnati, O., *Southern Medicine*; W. Litterer, Nashville, Tenn., *Southern Medicine and Surgery*; E. E. King, Toronto, Canada, *Canadian Practitioner and Review*; O. Juettner, Cincinnati, O., *International Journal of Therapy*; J. H. Burch, Baldwinville, N. Y., *Journal of Advanced Therapeutics*; S. S. Bishop, Chicago, Ill., *Illinois Medical Bulletin*; F. B. Bishop, Washington, D. C., *Advanced Therapeutics*; J. S. Billings, Jr., New York City, *New York Medical Journal*; M. O. Baer, San Juan, P. R., *El Boletín de la Asociación Medica de Puerto Rico*; Mary M. S. Johnstone, Chicago, Ill., *Woman's Medical Journal*; G. L. Richards, Fall River, Mass., *Annals of Otolaryngology and Rhinology*; Y. G. Martinez, Mayaguez, P. R., *Boletín de la Asociación Medica de Puerto Rico*; M. D. Lederman, New York

City, *Laryngoscope*; M. L. Foster, New York, *Annals of Ophthalmology*; L. R. Kaufman, New York, *The Chironian*; O. E. Lademann, Milwaukee, Wis., *Medical Fortnightly*; J. S. A. Gaines, Nashville, Tenn., *Southern Medicine and Surgery*; C. A. Wood, Chicago, Ill., *Ophthalmology*; C. Chassaing, New Orleans, La., *New Orleans Medical and Surgical Journal*; F. C. Eastman, Brooklyn, N. Y., *Neurographs*; G. H. Fox, New York City, *Medical Review of Reviews*; J. Burroughs, Asheville, N. C., *Gaillard's Medical Journal*; A. T. Huntington, Brooklyn, N. Y., *Medical Library and Historical Journal*; Margaret H. Rockwell, Toledo, O., *Woman's Medical Journal*; B. R. Schenck, Detroit, Mich., *Journal of Michigan State Medical Society*; E. Amberg, Detroit, Mich., *Journal of Michigan State Medical Society*; I. C. Chase, Fort Worth, Tex., *Texas State Journal of Medicine*; A. T. McCormack, Bowling Green, Ky., *Kentucky Medical Journal*; C. C. Stephenson, Little Rock, Ark., *Journal of Arkansas Medical Society*; J. W. Jervey, Greenville, S. C., *Journal of South Carolina Medical Society*; I. Dyer, New Orleans, La., *New Orleans Medical and Surgical Journal*; C. H. May, New York City, *Ophthalmology*; J. W. Wainwright, New York, *Dietetic and Hygienic Gazette*; G. A. De Saxe, New York, *New York Medical Journal*; A. W. Palmer, New York, *Homeopathic Eye, Ear and Throat Journal*; G. O. Hughes, Winnipeg, Canada, *Western Canada Medical Journal*; T. A. Woodruff, New York, *Ophthalmic Record*; J. L. Moffat, Brooklyn, N. Y., *Homeopathic Eye, Ear and Throat Journal*; H. F. Pitcher, Haverhill, Mass., *Advanced Therapeutics*; J. P. Warbasse, Brooklyn, N. Y., *New York State Journal of Medicine*; D. C. English, New Brunswick, N. J., *Journal of Medical Society of New Jersey*.

The papers presented were of unusual interest, were thoroughly discussed and will appear in the form of a bound transaction early this fall. The papers read were as follows:

"The Future of Medical Journalism," by James Evelyn Pilcher, M. D., President; "Shortcomings of Physiology the Chief Obstacle to Medical Progress," by C. E. DeM. Sajous, M. D.; "How Can We Make Medical Journalism Better? (a) For Our Readers. (b) For Our Advertisers. (c) For Ourselves," by W. C. Abbott; "A Word or Two from an ex-Journalist," by Samuel W. Kelley, M. D.; "The First Medical Journals," by O. F. Ball, M. D.; "Twenty-five Years of Medical Editorship," by Stephen Lewis Pilcher, M. D.; "The Psychology of Medical Journals from the Reader's Standpoint," by T. D. Crothers, M. D.; "Further Reflection on the Official Vervus Independent Medical Journals, One Year's History," by W. J. Robinson, M. D.; "The Situation," by C. F. Taylor, M. D.; "Some Aspects on Medical Journalism," by W. F. Waugh, M. D.; "Subject Not Announced," by J. J. Taylor, M. D.; "A Few Feeble Remarks," by W. A. Young, M. D.; "Medical Abstracts and Their Relation to the Medical Journal," by Mary M. S. Johnstone, M. D.; "The American Medical Editors' Association, Past, Present and Future," by Joseph MacDonald, Jr., M. D.

An important feature of the meeting was the appointment of a Committee on Publicity, whose duty it will be to see that the medical profession, through the medical press, are promptly informed upon all matters of general interest. The committee appointed was: W. J. Robinson, M. D.; Thomas Stedman, M. D., and the Secretary of the Association.

The following officers were elected: President, C. F. Taylor, M. D., Philadelphia, Pa., editor of the *Medical World*; first vice-president, Kenneth Millican, M. D., St. Louis, editor *St. Louis Medical Review*; second vice-president, H. E. Lewis, M. D., New York, managing editor of the *International Journal of Surgery*; secretary and treasurer, J. MacDonald, Jr., M. D., managing editor of the *American Journal of Surgery*.

Executive Committee—Dr. W. C. Abbott, editor of *American Journal of Clinical Medicine*, Chicago, Ill.; Dr. W. A. Young, editor of *Canadian Journal of Medicine and Surgery*, Toronto, Ont.; Dr. D. C. English, editor of the *Journal of the Medical Society of New Jersey*, New Brunswick, N. J.

THE AMERICAN ASSOCIATION OF MEDICAL MILK COMMISSIONS.

This new, national organization, the result of a conference of twenty-two Medical Milk Commissions in the United States, held at Atlantic City on June 3, 1907, is the logical outcome of the initial efforts to obtain clean milk through a Medical Milk Commission first organized in Essex County, New Jersey, by Dr. Henry L. Coit, in 1893. The objects of the national organization are, to encourage the formation of new Medical Milk Commissions in other cities, to fix uniform standards of purity for Certified Milk, and to harmonize the requirements and the working methods of the various medical commissions.

The conference was proposed by the Cincinnati Academy of Medicine and arranged by a committee consisting of Drs. Coit, Geier, Hamill, Freeman and Harvey. The conference was constituted by hygienic experts and physicians from twenty-four cities throughout the United States, and the great interest in the movement was shown by the large attendance of over one hundred delegates at the all-day sessions.

The following permanent organization was effected: President, Henry L. Coit, Newark; Secretary, Otto P. Geier, Cincinnati; Treasurer, S. McC. Hamill, Philadelphia; Council, above officers and R. G. Freeman, New York, chairman; H. L. K. Shaw, Albany; H. E. Tuley, Louisville; C. W. Brown, Elmira; A. W. Meyers, Milwaukee. Standing Committees: Medical Examination of Employees—W. H. Park, New York; M. J. Rosenau, Washington; Thomas W. Harvey, Orange; Alfred Hand, Philadelphia. Chemical Standards—D. L. Edsall, Philadelphia; L. L. Van Slyke, Geneva; H. D. Chapin, New York. Bacteriological Standards—M. J. Rosenau, Washington; H. A. Harding, Geneva; W. H. Park, New York; R. G. Freeman, New York; W. A. Stocking, Ithaca; M. P. Ravenel, Philadelphia; F. H. Slack, Boston. Veterinary Inspection and Protection against Tuberculosis—Prof. Leonard Pearson, Philadelphia; S. McC. Hamill, Philadelphia; Prof. A. R. Ward, Berkeley, California.

The next meeting will be held in Chicago in June, 1908.

STATE BOARD OF MEDICAL EXAMINERS OF NEW JERSEY.

At the eighteenth annual meeting of the State Board of Medical Examiners, held at Newark, July 5, Dr. E. L. B. Godfrey, of Camden, was elected President; Dr. A. Uebelacker, of Morristown, Treasurer, and Dr. John W. Bennett, of Long Branch, Secretary.

Of the applicants approved for admission to the examination, 18½ per cent. were rejected, two were expelled and one withdrew because of illness. The following applicants were granted a State license: Kate Elizabeth Armstrong, Philadelphia; Mary Latimer James, Philadelphia; Sara Elizabeth Foulks, Florence; Elizabeth Ethel Bowen, Philadelphia; Mary Reich Bowman, Mount Joy, Pa.; Alfred Garfield Sheppard, Florence; William Penn Vail, Blairstown; Bayard Knerr, Philadelphia; Allen Corson, Manasquan; Barclay Stokes Fuhrmann, Trenton; John F. X. Jones, Media, Pa.; Frederick Jones, Jr., Camden; Murray Baldwin Kirkpatrick, Jr., Moorestown; Blast Cole, Hainesville; Marmion Stanley Black, Swedesboro; Judson G. Cottrell, Matawan; William Augustus Newell, Mount Holly; William Hansford Pope, Philadelphia; Peter Boysen, Philadelphia; Howard J. Westney, Palmyra; Lucius Warren Johnson, Philadelphia; Aaron Lovett Dewers, Frankford; Alexander Vaughn McDonald, Philadelphia; Fred Stockton Watson, Trenton; William Leslie Cornwell, Bridgeton.

Next examination of Board October 15 and 16.

THE STATE SANITARY ASSOCIATION.

The Executive Council of the New Jersey Sanitary Association met at Atlantic City, June 3d, the Chairman, Edward Guion, M. D., presiding. It was the largest meeting we have ever attended. After considerable discussion, it was resolved to have the next annual meeting of the Association at the Marlborough-Blenheim Hotel, Atlantic City, in the first week of October, uniting with the American Public Health Association which is to meet at the same time and place. The Sanitary Association holding its business meeting in the morning of the first day—Tuesday—and its public meeting in the afternoon and evening of that day, the members of the American Public Health Association attending. The members of the State Association will attend and participate in the discussions of the National Association sessions. It was further resolved that the Association confine its presentation of papers to the President's address and a Symposium on Milk. The President, Dr. G. K. Dickinson, and Dr. G. E. McLaughlin, were appointed to select the phases of the subject to be discussed and secure speakers. Drs. Edward Guion, Henry Mitchell and James A. Exton were appointed the Committee of Arrangements for the meeting, in coöperation with the Committee of the American Public Health Association.

The Committee on Symposium has announced the following outline: General subject, "The Ideal Milk of the Future"; and the sub-divisions, 1. Ideal dairying and transportation; 2. Ideal milk—natural, pasteurized, condensed, dessicated—sanitary and dietetic values; 3. Ideal methods of local distribution—civic or individual; 4. Ideal control—government, state, city, boards of health or commissions—the latter philanthropic or appointed by central authority—governor. The speakers will be announced in the next issue of our JOURNAL.—Editor.

Pulsation in the course of an artery should not lead to the hasty conclusion that one is dealing with an aneurism. A tumor overlying a large vessel, and also a vascular sarcoma of the bone, may simulate an aneurism very closely.—*Amer. Jour. of Surgery*.

THE JOURNAL

OF THE

Medical Society of New Jersey.

AUGUST, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

A report of the Ninth Annual Meeting of the American Proctological Society held at Atlantic City in June, and also the report of Dr. J. W. Bennett's discussion of Dr. Godfrey's paper, were received too late for this issue of the JOURNAL. They will appear in our next issue.

Again we urge the PROMPT RETURN OF PROOFS sent for examination and correction, otherwise it will be inserted in the JOURNAL unchanged. We call attention again to the rule of our Publication Committee that the expense of matter added and mere changes of expression that do not materially alter the meaning are chargeable to the author. The editor must not always be held responsible for the faulty expressions and errors in the use of capitals or lower case that sometimes appear because the author so prefers. As a rule we follow "Notes for the Guidance of Authors in the Submission of Manuscripts to Publishers," issued by The Macmillan Company.

We again respectfully insist that all papers, reports and other communications should be type-written, or if that is not possible, that the hand-writing should be legible. The editor, while accustomed to deciphering indistinct manuscript, is sometimes puzzled, and the experienced typesetter even more so, not being versed in medical terms and not knowing the names of medical men, especially of foreign physicians.

THE STATE TUBERCULOSIS SANATORIUM.

We have frequently referred to the JOURNAL as the organ of the Medical Society of New Jersey, and, in a limited sense, of the county societies—as the medium through which they communicated their views and actions and especially their scientific work to the profession, primarily in the state of New Jersey, and to the profession outside. It never has been governed by, nor will it represent, any clique or faction within our ranks. It is, and will continue to be, independent in its utterances as we conscientiously believe the good of the profession and the highest interests of the citizens of our state demand, and especially in regard to the relation of the medical men to the dependent class of our citizens as related to our State Institutions. In our commendations and criticisms we shall always strive to be impartial and just, recognizing the principle that to the most modest and obscure practitioner is due the same consideration as is accorded to the more prominent and gifted member of our profession. If we err at all we prefer to favor the former, as we realize that they often enjoy less advantages and labor under greater difficulties in the prosecution of their studies and work.

Holding these views we refer with pain to the unfortunate differences that have been manifested in the management and control of our State Tuberculosis Sanatorium. We enter upon no discussion of the individual responsibility for these differences, for there have been conflicting accounts, and accurate knowledge must be the basis of correct judgment, but the editor does express his conviction that it is exceedingly unfortunate that these differences could not have been adjusted in the spirit of harmony and sound judgment, so that the state should not have lost the valuable services of the three men of national reputation who have been identified with its management from its inception, and whose only aim we believe was to make the institution a model one, and that the institution should not have suffered from even the *suspicion* of questionable methods

and mistaken judgment in its management. There are two things we believe essential to the success of this institution—thorough equipment in buildings and furnishings and the best skill obtainable in its management. These would demonstrate to the people of New Jersey that the medical profession made no mistake in urging its establishment and that the Legislature wisely made the appropriation for it.

Our editorial in the June issue of the JOURNAL, on The Appointment of Medical men in our State Institutions, while not written with special reference to the Sanatorium, but for the purpose of calling our members' attention to the proposed action by our Society—that our Board of Trustees should suggest names to the Governor for his consideration in making appointments on the Boards of our State Institutions when medical men are to be appointed, will apply *if possibly* favoritism or political influence, or political methods have intentionally or thoughtlessly entered into the Sanatorium management. We reaffirm the position taken in that editorial with the added emphasis we would give it because of its approval expressed by many members of our Society. We insist that the dignity and good name of our profession, the honor of our Society and the most sacred interests of our state in its care for its unfortunate citizens alike demand that the medical men who serve on the board of management of this and the other State Institutions shall never allow selfish motives, personalities, favoritism—personal or political—to govern their actions in the performance of their official duties.

We see by the daily press that Dr. Henry H. Davis, of Camden, has resigned as Superintendent of the Sanatorium, to which position he had been elected. We believe that the doctor's action is a wise one because for the highest efficiency of a new and important state institution, not only should the superintendent have the fullest support of the medical profession throughout the state, but the board of managers should have their fullest confidence as to their impartial-

ity and good judgment; and because the doctor has important positions in the city and county of Camden where his services are highly appreciated, his work is perfectly congenial and he enjoys the society and confidence of his medical brethren. We sincerely congratulate him on his decision.

The Medical Society of New Jersey has the deepest interest in and desire for the success of this Institution for whose founding it is largely responsible, and we shall hope for and expect, for the credit of our state, as well as of our Society, the utmost harmony, the purest motives and the highest skill in its management and control.

DR MARCY ON THE USE OF ALCOHOL.

In President Marcy's address before our Society, as printed in our July issue, an error occurs which fails to set forth his remarks concerning an article quoted by him on the use of alcohol. We received an advance copy of the address for the JOURNAL and sent the doctor proof, which was corrected. Subsequently, after the meeting, we received a revised copy from him containing two additional items. One was an extract from a document issued by the National Liquor Dealers' Association, giving the expression of several English physicians favoring moderate drinking, as will be found on page 3, July JOURNAL. Unfortunately the doctor did not send with that an account of what he said in reading it, as follows: *"It does not represent the consensus of opinion of the medical profession, at least in this country, and I think we should take some measures to correct the false impression that that association is producing, by promulgating such views as this and having it appear as though the profession in this country endorsed the statement that moderate drinking was beneficial."*

In the pressure of JOURNAL work, with the two supplements to the July issue, which was already delayed beyond the usual time, proof of the revised address was not sent to the doctor, but was carefully revised by us and printed exactly according to copy

furnished, and though the doctor writes, "I do not blame you for it," yet we regret that final proof was not sent him. The doctor's attitude on this subject, however, was not thereby left in doubt. We believe he takes the view that a conscientious physician, who realizes his responsibility concerning the drink evil, should take, and in this belief we are sustained by eminent men in our profession, and their number and influence is yearly increasing. We quote the following from the *Evening Post*, as a concise statement of recognized medical opinion:

ALCOHOL IS UNNECESSARY.—A COUNTERBLAST to the recent declaration in favor of alcohol by leading physicians of England is now published by the medical press in London over the signatures of a dozen physicians, including Sir Frederick Treves, Sir James Barr and William Ewart. Referring to it, the signatures say: "We gravely dissent from much of its teaching, nor can we accept it as an authoritative statement of recognized medical opinion on the matter." After traversing some of the contentions of their colleagues, who advocated alcohol, the signatures further say:

"We strongly believe that alcohol is unnecessary as an article of consumption in the case of healthy men and women, and that its general use could be discontinued without detriment to the world's welfare. Further, believing that alcohol is one of the most fruitful sources of poverty, disease and crime, we are pleased to add that it is now sparingly employed as a remedy by a majority of medical men."

THE AMERICAN MEDICAL EDITORS ASSOCIATION.

We publish in another column an account of the thirty-ninth annual meeting of the American Medical Editors' Association, held in Atlantic City, June 1st and 3d, 1907. It was one of the most largely attended and best meetings the Association has ever held. The annual address by the president, Dr. James E. Pilcher, and the various papers read, were generally of a high order of excellence. The reports showed that the As-

sociation had a slow growth until about five years ago, when it had a membership of only twenty-five editors; since then its growth has been rapidly increasing, and now there are 197 editors enrolled, representing 123 journals.

We believe there was the highest wisdom exercised in the organization of this Association, not only for the personal advantage of its members, as contact broadens and deepens the intellectual faculties and social intercourse tends to soften the combative tendencies which often hinder rather than facilitate scientific advance; but also because it is capable of doing a great work in raising the standard of medical journalism and so advance the medical profession, assisting and stimulating the members of the profession generally to more earnest study of the many scientific problems yet awaiting solution, as well as unifying its membership in the efforts to establish and maintain true ethical principles.

We cannot here refrain from expressing our strong conviction: 1. That a great responsibility rests upon the editors and editorial management of our journals; that we should concentrate our thought and effort on more thorough organization and more intelligent methods of using perfected organization for the increase of the individual member's knowledge in the science and art of medicine and so for the advancement of the profession in its efforts to save life and protect and bless humanity. 2. That our Editors' Association should have a weighty influence in these directions. Shall we not lay aside all discussion of the comparative value of the State Society JOURNAL and the so-called independent journal, or the *supposed* antagonism of each to the other? There should be no jealousy or strife between us, for each journal has its sphere and we should help rather than antagonize each other. On all subjects where we differ let us harmonize on the basis of cleanness in the conduct of our journals, and charity mingled with justice toward each other, recognizing the right of members to differ in non-essentials, while

standing together for what is right in fundamental matters, involving ethical relations toward each other and the profession at large, and for the highest welfare of the public. The Nostrum evil and all other evils which affect the profession and are especially detrimental to the lives and health of the public should be considered by a committee composed of able, fair-minded men, of diverse opinions, and some definite conclusions should be reached. That there have been gross inconsistencies in the attitude taken by parties in antagonism on the subject of legitimate and improper advertisements for a medical journal, seems to be unquestionable. Let us have some sensible and practically harmonious solution of these differences which are not creditable to the profession. The good of the profession and the sacred interests of the public alike demand their solution.

The editor of this JOURNAL may be pardoned for the seeming indelicacy of thus expressing his deep convictions, after having been honored by the Association—in his election as a member of its Executive Committee, because he—as a new member, accepts this honor as intended to be conferred rather on the Medical Society of New Jersey than upon himself personally; and because of his further conviction that the members of the Association generally will not widely differ with him in the sentiments he has expressed.

NEW JERSEY DOCTORS HONORED.

The American Medical Association, at its recent meeting at Atlantic City, honored three members of our State Society by electing them as officers of the Association, as follows: Dr. W. Blair Stewart, of Atlantic City, as Fourth Vice-President; Dr. Philip Marvel, of the same city, as a Trustee, and Dr. Charles J. Kipp, of Newark, as a member of the Judicial Council.

TYPHOID FEVER IN THE STATE HOSPITAL AT TRENTON.

We note, with deepest regret, the reports of the severe outbreak of typhoid fever at

the State Hospital for the Insane at Trenton, and sincerely hope that the investigation into its origin will not reveal the neglect of precautionary measures on the part of the management which newspaper accounts seem to indicate. We give in another column an editorial from the *Newark Evening News* which presents two newspapers' views which differ decidedly as to the managers' responsibility for this outbreak. We delay further comment until thorough investigation, free from political bias, by competent men, shall have been made.

NEW JERSEY STATE VILLAGE FOR EPILEPTICS.

We have received the Ninth Annual Report of the New Jersey State Village for Epileptics, for the year ending October 31, 1906, from which we learn the following: That there is a balance in the treasury over liabilities of \$8,277; that the farm earnings over expenses was \$2,142.51, and the net earnings of the garden were \$161.35; a children's building has been erected during the year and 44 children admitted; great improvements have been made in the buildings and grounds; a hospital building is needed and also a custodial building for men and one for women on account of the demands for admission being greatly in excess of the accommodations; the enlargement of the filter beds and tanks is needed. The Superintendent's report shows the number under treatment at the beginning of the year 91 males, 55 females; admitted during the year 48 males, 38 females—total treated during the year 232; number discharged 7, eloped 4, transferred to asylum 1; died 4. The percentage of mortality was 1.72; the ages of those admitted during the year are detailed in five-year periods from 5 to 80 years of age, the youngest patient admitted was 7 and the oldest 76. The report sets forth in detail the following points: Age at time of first attack; the intervals between the first and second convulsions; the heredity; the assigned causes of the epilepsy; the auras present; the length of time epilepsy had existed prior to admission; the social conditions of those admitted and the counties from which the patients were admitted. A large amount of farm, dairy, laundry and other work has been done by the inmates, and the report shows good careful management on the part of those in charge of this important work.—*Editor.*

HOSPITAL OF ST. BARNABAS, NEWARK.

Forty-First Annual Report.

This report shows a year of prosperity and of good results. The endowment fund has reached \$96,000. The finances are in good condition; \$500 are desired to complete the Mortuary Chapel and \$6,000 for a building for the servants now lodged in hired building outside the Hospital grounds. The Training School has moved into the new building for nurses—the increased efficiency of the nurses and their greater interest in the work is noted. The occupation, nativity, sex and denomination of patients are given. The catholic spirit of this Hospital management is shown in that

while this Hospital is managed and supported largely by Episcopalians only 144 of the 1028 patients treated during the year belonged to that denomination.

Of patients there were in the four divisions:—Gynecological, 230 patients, 196 cured, 10 deaths; obstetric, 77 patients, 63 cured, 4 deaths; medical, 287 patients, 158 cured, 62 deaths—principal causes of death in the medical division: Apoplexy 4, basilar meningitis 2, lobar pneumonia 11, tuberculosis (pulmonary) 6, endocarditis 6, carbolic acid poisoning 6, nephritis 6, typhoid fever 2, marasmus 3; surgical, 385 patients, 25 cured, 29 deaths.

Of 151 surgical operations we note: Amputations 11; appendectomy, 32; Bassini operation, hernia, 6; excision tubercular glands, 4; exploratory laparotomy, 2; fistula-in-ano, 3; Halsted's operation-carcinoma, 2; hæmorrhoids removal, 14; colostomy, 3; osteotomy, 3; suture of stomach, perforation, 1; tenorrhaphy, 2.

Of the 193 gynecological operations: Appendectomy, 16; Cesarean section, 3; cholecystostomy, 2; cholecystectomy, 2; dilatation and curettage, 31; same with perineorrhaphy, 15; same with appendectomy, 5; ectopic gestation, 2; Gilliam, etc., 9; hernias, 9; hysterectomy, 28; myomectomy, 4; ovariectomy and ovariectomy, 6; salpingectomy, and salpingo-cophorectomy, 6.

Of deaths in gynecological division, the ten were as follows: One each, ectopic gestation, multiple sarcoma, ventral hernia, post-operative intestinal perforation with septic absorption following removal of ovarian cyst, eclampsia, carcinoma ovary filling entire abdomen, carcinoma uterus far advanced, ulcer duodenum, intestinal obstruction, retro-peritoneal cyst followed by embolism of heart.

Miss A. A. English, Superintendent Training School, reports seven nurses graduated this year; 95 in the eleven years of school; 16 pupils at present in school.

CAMDEN CITY DISPENSARY.

The Fortieth Annual Report of the Board of Managers of the Camden City Dispensary, for the year ending January 15, 1907 has been received, and we refer to the excellent work that has been done—137,921 patients treated since it was organized. During the past year 1638 treated, 1962 visits at the Dispensary and 1142 to residences were made by its staff. Howard M. Cooper is president and Dr. H. Genet Taylor, secretary of the Board of Managers. Drs. Pratt, Wills, Hirst, Lee, Klechner, Rossell, Hummel, Sorin, White, Roberts, Osmun and Casperson compose the staff.

CRITICISM OF OUR STATE INSTITUTIONS BY THE DAILY PRESS.

No Sanatorium Head.

A new complication has arisen in the management of the State Sanatorium for Tuberculosis Diseases at Glen Gardner. Dr. H. H. Davis, who was chosen nearly two months ago to be the superintendent of the institution, has resigned. His expressed reasons are because his wife does not want to move from Camden to Glen Gardner, and because his duties as health physician to Camden's public schools are too important to be given up for work among the indigent consumptives at the state sanatorium.

There is reason to suspect that these are not the only considerations that have brought about

the resignation of Dr. Davis. It will be recalled that at the meeting of the board of managers at which he was elected superintendent, three of the most active and eminent members of the board resigned. These were Dr. Kipp, of Newark; Dr. Green, of Elizabeth, and Professor Scott, of Rutgers College; men who for many years had given their time, their work and their influence for the establishing and the upbuilding of this particular institution.

Three men were appointed to fill the vacancies, but one of them, who resides at Somerville, not far from the sanatorium, declined to serve, on the ground that he had no particular interest in the work of the managers. The members of the board who resigned last May stated that the choice of the majority of the board for superintendent was not a man experienced in such work, and therefore they believed their usefulness to the sanatorium was at an end.

There seems to be something in all these facts which leaves the impression that a fair, thorough investigation of the conditions at Glen Gardner would be of advantage. The board is not filled, the sanatorium is without a head and it has, within two months, lost three of its strongest and most useful advocates. It would be a pity, indeed, if, after the state has done so much for the relief of indigent consumptives and for the stamping out of the white plague, the sanatorium should fall into weak, inexperienced or incompetent hands, or that it should, to any degree, be made the spoil of politicians and should fall below the standard of its eminent and trustworthy projectors.—From the *Newark Evening News*, July 19, 1907.

A Plea For No Condemnation.

In spite of the evidence of negligence at the Trenton State Hospital for the Insane, the *Trenton State Gazette* holds that "there is no reason why anybody should be condemned" because of the deadly outbreak of typhoid fever in the institution. The *Gazette* goes a step further, and says that instead of there being condemnation, "the forces at work ought to be commended for the efforts they are making to check the further advance of the disease." This is a remarkable attitude for a newspaper to take. There is documentary proof that there was an attempt made to suppress reports of the epidemic in its early stages. Later, when it was seen to be impossible to keep the facts from becoming public, there was an appeal for help to suppress the fever. Yet when the State Board of Health, which had been called in, gave directions as to what ought to be done to successfully combat the fever, its suggestions were not heeded, as they should have been, promptly. Later, when the situation was even more desperate and scores of inmates and employes had been stricken with the malady, with at least a dozen resultant deaths, even the orders of the state board were ignored. It was only when there was concerted action on the part of the state and local health authorities, with threats of legal complications, that there was a determined effort made to do the things that were declared to be absolutely necessary to bring to an end the outbreak.

And yet, with all these facts before it, the *State Gazette* has the temerity to repeat that "there is no reason why anybody should be condemned." Has that newspaper any other reason for giving such an opinion than politics?—*Newark Evening News*, July 19.

The "Science" of Osteopathy.—We have before us the following letter from Dr. C. E. Still, dean of the American School of Osteopathy of Kirksville, Mo., written in search for a professor of physiology:

"Dear Sir:—I notice your name in connection with the catalogue as Professor of Physiology. We are in need of a physiology teacher and for the right man will pay a good salary. We would like to have you recommend to us some one that is thoroughly acquainted with his subject. We have an institution of seven hundred intelligent men and women, many of whom are graduates of Yale, Harvard, Princeton and Northwestern University. This chair will be vacant at the end of this school year. We would like to get some one who had held a chair in some prominent institution.

"Thanking you in advance for any information, I am,

"Yours truly,

"C. E. STILL, Dean."

We trust the new professor when appointed will be able to harmonize physiologic science with the following lucid statement by Dr. A. T. Still, the founder of the sect, concerning his osteopathic philosophy, extracted from the *Journal of Osteopathy by Modern Medical Science*:

"By my method of reasoning I arrive at the conclusion that man was, after receiving his form, like unto the world on which he dwells, and that in his body could be found all the mineral, vegetable, and animal substances that could be found in the beasts of the field, the fowls of the air, fishes of the sea, both great and small; in short, all that was contained in this and all other planets and beings, from the throne of God (Himself included), to the lowest form of animated beings; that in the human being all attributes of mental and physical were represented in kind. With this conclusion I proceeded and did obtain what I have proclaimed and proven to be truths universal in kind and action submitting to and being governed by one common law. I reasoned that all effects as are shown in disease with the result of the productions of the truths of the one great common law, mind and motion expressing themselves through matter. Motion is an effect of life with its powers. Disease in any form or presentation was another effect. Conception of beings, diseases, and words, were the biogenic answer of the wombs of nature either large or small, believing while I was in the chambers of sober and intelligent nature where honest reason only can dwell, that it was safe to follow the teachings of that principle that made no mistakes that I could detect."

Although this was written some time ago, we have heard of no change of views expressed.—*Editor.*

Doctors vs. Lawyers.—For some years it has been the custom to have an annual baseball game between teams representing the medical and legal professions of Paterson, the proceeds of the game being devoted to some local charity. This year the regular game resulted in a tie after eleven innings, and it was decided to play a second game, to settle the question of superiority. The final game was played on July 24th, and was won by the medical team by a score of 15 to 6. This result was largely due to the good work of the medical battery, Drs. Rauschenbach and Bergin, and to the skill displayed by Dr. Henion, Re-

porter of the County Society, both at first base and with the stick. The proceeds of the game were divided between St. Joseph's Hospital and the Nurses' Home fund of the Paterson General Hospital.
E. J. MARSH, JR., Secretary.

Current Medical Literature.

Beneficial Effects of Buttermilk.—Buttermilk as a remedial agent cannot be praised too highly. The lactic acid, the sour of the buttermilk, attacks and dissolves every sort of earthy deposit in the blood vessels. It keeps the veins and arteries so supple and free-running that there can be no clogging up, hence no deposit of irritating calcareous matter around the joints, nor of poisonous waste in the muscles. It is the stiffening and narrowing of the blood vessels which bring on senile decay. Buttermilk is likely to postpone it ten or twenty years, if freely drunk. A quart a day should be the minimum, the maximum according to taste and opportunity. Inasmuch as gouty difficulties arise from sluggish excretion, buttermilk is a blessing to all gouty subjects. It stimulates liver, skin and kidneys. It also tones the stomach and furnishes it the material from which to make rich, red, healthy blood. If troubled with gout, avoid meat, sweets, pastry, wines, spices, hot rolls, bread of all sorts, and everything belonging to the class of ferments. If any one has a creaky joint or a swollen and aching one, he should drink all the buttermilk he can relish whenever and wherever he can, but it should be fresh and wholesome.—*International Journal of Therapy.*

The Criterion of a Modern Hospital.—A sumptuous and absolutely modern operating room is not infrequently the criterion by which the character of a hospital is judged. This is neither a just nor a complete criterion. A hospital may have a veritable gem of an operating room and be woefully behind the times in every other respect. A better criterion is by far the character of the men who are doing the medical work in an institution. If they are men who think that medical progress is bound up in the knowledge of the latest drug preparation, the institution is necessarily behind the times. The criterion of a modern hospital is the relative prominence which is given to the practice of the modern, strictly scientific branches of medicine, especially the therapeutic uses of light air, water and food. Even the most hopeless exsiccated therapeutic mummy will, by way of protest, say: "We all know the importance of these branches and do use them." The emphatic answer to this stereotyped reply must be: "You do *not* know the importance of these branches and you do *not* use them!" The perfunctory and routine references that are made to modern methods are in the nature of faint praise that kills. We insist on a conscious appreciation and a systematic application of these therapeutic agents. We know that they are the pivots of modern medicine and we insist that they be given a place in keeping with their overtowering importance not only as prophylactics of disease, but as therapeutic measures in the treatment of disease. The art of modern medicine does not consist in knowing how to prescribe, but in knowing how not to prescribe. Drugs are auxiliaries in the removal of symptoms but never essentials in the treatment of conditions.—*The International Journal of Therapy*, March, 1907.

Osculation—Is It Harmful or Wholesome?—

Our friend, the editor of the *New Albany Medical Herald*, is authority for the statement that kissing is a splendid aid to digestion. He discredits the perils which beset the path of osculation. Says he: "Some time ago we were told, apparently on good authority, that kissing was decidedly unhealthful. We were also told that germs and microbes were freely exchanged in the process, and that kissing was one of the worst methods of disseminating disease that could be imagined. This was very uncomfortable indeed, the more so as disinfection could by no means be relied upon. Now, however, those who received the new theory with scorn, are triumphant, for it has been abundantly shown that instead of being harmful, kissing is a remarkably wholesome and healthy process. Kisses carry microbes, but then it is good and beneficent microbes, and not bad ones. Good microbes, as everybody knows, are not only useful, but are essential to health. Kissing is, in fact, an 'instinctive therapeutic process'—think of it! And it is especially good for the digestion. Thus has cold-blooded science done its best to rob another good old time-honored custom of all sentiment!"

What a vista of clinical possibilities are opened up by the discreet use of osculatory therapy! The physical characteristics of this new therapeutic agent have already been well established. The electro-therapist considers it a suddenly produced short-circuit caused by elimination of the spark-gap with no danger of the fuse blowing out. Even the shape of this new agent has been defined with mathematical precision. It is thought to be elliptical (a lip tickle). Its application, if prolonged, is said to be followed by elevation of temperature in both operator and patient. In overdoses it may produce hallucinations, insomnia and various forms of mental derangement. No age or sex is proof against its baneful effect if administered in large doses. In small doses it acts as a gentle stimulant. Frequent indulgence may cause a regular habit which is hard to cure. The new therapeutic agent is held in great esteem by all schools and pathies. It is said to be useful in certain functional diseases of the heart. We will be glad to hear from any of our readers who have had clinical experience.—*The International Journal of Therapy*, March, 1907.

[Our brother-editor is inclined to be facetious, but there is a serious side to this question which the careful, conscientious physician should recognize—the danger of indiscriminate kissing, especially when one of the parties has a disease of the nose or throat which may be communicated, or during the prevalence of contagious or infectious diseases in a community.—*Editor*.]

Rectal Feeding.—The conditions that must be present in order for attempts at rectal feeding to be successful are summed up by Becker as follows: (1) The rectum must be in a fairly normal condition. Inflammation of any kind, especially eczema, internal piles, or pressure by the fundus or cervix uteri upon the rectum, must be absent. If such conditions do exist, they must be ameliorated if possible. (2) The rectum and descending colon must be free from contents. (3) The composition of the food introduced must correspond to physiological exigencies of the rectum and colon. (4) The food must contain as much nutrition as possible, condensed to as little volume as possible. The volume should never exceed 250 c.c. (5) The temperature of the food is of

great importance. It should range between 42 and 45 degrees C. (6) The rectum and the colon should be quieted an hour before and a few minutes after meal with an opium and belladonna suppository—not morphine, which has a tendency to produce vomiting.—*Wisconsin Medical Journal*.

Post-menopausal Bleeding.—Dr. G. E. Shoemaker, in a paper read at the meeting of the Obstetrical Society of Philadelphia, on Vaginal Hysterectomy, laid great stress upon the importance of paying heed to post-menopausal bleeding and cases were cited bearing upon this condition. Such hemorrhage is almost invariably accompanied by malignant changes. Curetting and careful microscopical examination should be made in each case, but the danger of overlooking early malignancy in the examination of scrapings was pointed out. Only a few and perhaps none of the tiny pieces removed by the curette might happen to contain structure from which a diagnosis of malignancy could be made even if it were present. The truth of this position was emphasized by reference to a case in which he removed the uterus for constantly increasing hemorrhage at the age of 41 under a clinical diagnosis of malignant adenoma. The microscopical report pronounced the adenoma benign, but three years later there is reported a recurrence of malignant disease in the vaginal scar, which proved the clinical diagnosis to have been more correct than the microscopical.

Yellow Glasses.—Motais (L. Ophthalmologie Provinciale) declares yellow glasses are indicated in cases of retinal hyperæsthesia and in all cases of internal disease of the eye in which blue or smoked glasses have been heretofore prescribed. He also advocates their use in motoring and mountaineering, where snow glare is to be encountered. The yellow should be of such a tint that it appears slightly orange by transmitted light and brownish by reflected light. Such glasses increase the apparent illumination of the objects seen by the eyes and yet feel soft on use. Analyses of the spectra of various tints of colored glasses show that the violet end of the spectrum is shortened by all tints, while the red end is unaltered. The rays which irritate the retina seem to be the chemical ones, and these are largely cut off by the yellow tints of glasses.—*Med. Rev. of Rev.*

Unusual Suppression of Urine.—H. D. Howe, *N. Y. Medical Jour.*, December 15, 1906, reports a case, his patient being a woman, age not given. She passed no urine for a period of twenty-five days, and died from anemia. There was no coma, and there were no general convulsions, though twitching and local spasms were frequent. The anemia was referred to a hydronephrosis following on blocking of the ureters with a carcinomatous deposit. Autopsy showed the left kidney to be a mere thin-walled cyst, containing about ten ounces of clear fluid. The thick abdominal walls, the thinness of the cyst walls, and its situation beneath the ribs, were the evident reasons for its being overlooked. There was no microscopic evidence of kidney structure. The ureter was obliterated at the pelvic brim by a carcinomatous mass, originating from the stump of the broad ligament and involving the sigmoid and rectum. The right kidney showed true hypertrophy of the kidney structure, as well as great

dilatation of the pelvis. It measured ten inches in length, four and a half wide and three thick, and contained nearly a pint of urine. There was a small carcinomatous involvement of the lower portion. As on the left, the ureter was entirely obliterated by a carcinomatous mass arising from the stump of the right broad ligament.

Cholangitis and Cholelithiasis.—Charles Gilbert Davis, M. D., Chicago, Professor of Surgery and Gynecology, Lakeside Post-Graduate School, reports on the treatment of catarrhal cholangitis and cholelithiasis with pills similar to Bauermeister's proobilin, i. e., consisting of acid sodium oleate, salicylic acid, phenolphthalein and menthol.

The use of salicylic acid in pathologic conditions of the liver he began twenty-five years ago, and he found it particularly satisfactory in combination with the other drug, as a cholagogue and an antiseptic whose effect is prolonged throughout the alimentary tract. Many cases which are ordinarily considered amenable only to surgical interferences can be satisfactorily treated with the pills, and he believes that under their use cholangitis, with and without stones, will ultimately cease to be a surgical condition. He relates six typical cases in which he found the combination effective, not as a purgative pill, but more especially as a cholagogue, a concretion solvent and a biliary disinfectant. The menthol and the phenolphthalein produce and regulate intestinal activity, and the salicylic acid and the oleate have a decided antiseptic and powerful cholagogue action. As to diet, he does not restrict the same too closely, but interdicts all foods known to be difficult of digestion, and all alcoholic beverages. The principal point to be observed is to insist that large draughts of hot water be taken with the pills, for the purpose of diluting the excretions and assisting in breaking up any concretions present.—Abstracted from *The Therapeutic Gazette*, July 15, 1907.

Multilocular Ovarian Cyst Successfully Removed from an Infant Aged Eleven Months.—

The case is reported by C. W. McGillivray (*The Lancet*, June 1, 1907), into whose hospital service the child was sent with the diagnosis of tuberculous peritonitis calling for surgical intervention. The child was ill-nourished, cyanotic, with rapid pulse, dyspnea, some diarrhea, and marked abdominal distention. Nothing could be made out as to the abdominal contents, as the walls were of drum-like hardness. Some clear yellow fluid was withdrawn from the abdominal cavity and finally it was determined that the whole abdomen from diaphragm to pelvis was filled with a mass containing separate cavities filled with fluid. Under chloroform an incision was made to the left of the middle line just below the umbilicus. A large cyst came into view and was punctured, but only a little fluid escaped. The poor condition of the patient and the fact that a more extensive operation was evidently needed led to a prolongation of the incision upward to nearly the ensiform cartilage. A large double multilocular cyst was found, the two halves being nearly equal in size and attached to each other by loose connective tissue between their fibrous walls. Length, on removal, was nearly eleven inches and thickness four to five inches. In spite of the desperate condition of the child at the close of operation it eventually recovered. The author closes with some remarks on this class of growths in young children.

Only one younger patient of this class is on record, as the intraabdominal condition began at the third month of life. Another feature was the retroperitoneal position of the tumor, as shown by the appendix, cecum, and ascending colon lying in front of it and stretched over its surface, and the fact that the posterior layer of the peritoneum had to be torn through in order to enucleate the tumor.—*Medical Record*, June 22, 1907.

The Treatment of Delirium Tremens.—Eichelberg (*Münchener medizinische Wochenschrift*, May 14, 1907) presents the statistics of the cases of this sort treated in the Eppendorf Hospital of Hamburg in the past eleven years. These number in all 1,574, of which 1,043, that is about a third, were uncomplicated, whereas 531, or one-third, were attended by more or less serious complications. Of the total number of cases, 2.4 per cent. ended fatally, and, including the cases in which there was also pneumonia, the death rate was 5.5 per cent. The death rate in 173 cases complicated by pneumonia was 33 per cent. In regard to the treatment the author states that it is customary in this institution to withdraw the alcohol at once and to lay great stress on sustaining the heart action by the use of digitalis and other stimulants. Diuresis also is to be encouraged, and in cases complicated by pneumonia both digitalis and alcohol are resorted to.—*Medical Record*, June 22, 1907.

Empyema.—By connecting a Politzer bag with the drainage tube in cases of empyema the discharge of pus is greatly facilitated. The bag is compressed and its tip inserted into the end of the drainage tube, a short section of rubber tubing intervening if necessary. The bag in expanding exerts constant aspiration in the abscess cavity, and the discharge is all collected in the bag, which is emptied at regular intervals.

Sins of Omission and Sins of Commission in Gynecology.—Dr. G. H. Balleray read this

paper. He said that those who engaged in the practice of gynecology had a great number of sins to answer for; the sins of omission were credited to the general practitioner, and the sins of commission to the specialist. The sins of omission began in the lying-in room, and many of the diseases that the child-bearing woman suffered from were due to the negligence of the medical attendant during the two or three weeks immediately following delivery. Lesions of the genital tract were overlooked, the vagina was not douched, and the patient was allowed to leave the bed about the ninth day and at once assumed the upright position and generally returned to her usual occupation, besides enclosing her chest and abdomen with a corset. As a result the vaginal outlet, owing to possibly a non-union of a perineal wound, was large; the vagina had not undergone involution; the uterus was large and heavy, and the cervix lacerated. When on her feet the uterus sagged down, and the uterine ligaments, having not yet recovered their tonicity, offered but little resistance to its descent. In addition the tight corset and the constipated condition brought about complete procidentia of the uterus. If flexion was produced, it induced venous stasis and interfered with the process of involution, led to catrrhal endometritis, salphingitis, and chronic invalidism. The medical attendant had done nothing to obviate this deplorable condition. Had

he repaired the lacerations of perineum and vagina, kept the woman in the recumbent posture for about four weeks, having during this time administered three large and hot vaginal douches daily, the patient might have assumed the erect posture, and engaged in her ordinary occupations without detriment. Dr. Balleray believed that all of the recent lacerations of the cervix, or nearly all, would heal spontaneously, if the patient retained the recumbent posture for a month and the vagina was kept thoroughly clean. Primary suturing of a lacerated perineum had proved a very successful operation and it should be practised in nearly every case. Some authors had stated that in all primiparæ the cervix was more or less lacerated; if this statement was true he thought it to be a sad commentary on their obstetric skill, or the degeneration of tissue, resulting from civilization. After the patient was up and about, she should wear the weight of her skirts suspended from the shoulders. No corset should be worn. The period immediately following delivery was not the one in which the women should practise calisthenics. He could not too strongly insist upon the fact that in the treatment of recent lacerations, the results of labor, rest, and cleanliness were of the greatest importance. Cancer of the cervix, which constituted fully 90 per cent. of all forms of cancer of the uterus, never occurred except in those cases in which some form of traumatism had been applied to the cervix. He did not believe that there was a well authenticated case of cancer of the truly virginal cervix on record. Neglected lacerations of the cervix were responsible for the occurrence of cancer of that portion of the uterus. The physician should examine every woman he had attended in labor to ascertain if she was suffering from any lesion of the genital canal. It was only necessary for the profession to be imbued with the necessity of such an examination in order to make it popular. One of the greatest difficulties in carrying out this in private practice was the ill-conceived *amour propre* of the attending physician who was apt to feel that the revelation that a lesion of the genitals existed would be regarded by the patient and her friends as evidence of lack of *savoir faire* on his part. When the operative gynecologist was consulted in cases of this kind, he should explain to the patients that the lesions of the genital tract sometimes occurred in childbirth even under the most skilful treatment. As a factor in the causation of pelvic disease in women, gonorrheal infection occupied a prominent position and at least 40 per cent. of all women suffering from diseases peculiar to their sex owed their invalidism to the baneful influence of the gonococcus. That nearly all such women could be promptly cured in the early stages of the disease, if properly treated, did not admit of a doubt. If the time ever came when the family physician would take the trouble to examine into the nature of every case of purulent discharge, and would resort promptly to efficient means of treatment, they would then meet with very few of those cases of destructive inflammatory lesions of the female pelvic organs. It was to be hoped that the time would soon come when the family physician would familiarize himself with the means of diagnosis in the incipient cases of cancer. Dr. Balleray said that the sins of commission were the sins of the operative gynecologist. At times he was thoroughly honest in his conviction that he was doing right, but in many cases mutilating operations were performed which were

unjustifiable, and had absolutely no *raison d'être* except in the love of *éclat*, and the undying fondness which some men cherished for operative gynecology. * * * * *

Dr. Edwin B. Cragin believed it would be better to speak of the sins of omission in obstetrics and the sins of commission in gynecology. In looking over the work at the Sloan Maternity they had been led to get the patients up a little early rather than to keep them in bed beyond the normal time of nine or ten days, for the reason they found that retroversions were extremely common. If they sent these patients out in two weeks, which was their rule, many would go with retroversions if most of the time was spent in bed. At present all sat up in bed as early as the fifth day, and were out of bed on the ninth day, and it was observed that posterior displacements of the uterus were less common than when they remained in bed longer. With regard to healing of the cervix, he believed it was better if the patient was allowed to get up so that the parturient canal would drain and keep clean; this was better than the use of douches with their possible risk of infection. As Dr. Polk had stated, each case must be decided upon its merits. With regard to repair of lacerations of the cervix, Dr. Cragin said he was afraid to teach students to make repairs of these immediately after labor. If it was an operative case, with assistants, full anesthesia, with a good light, repair of these cases immediately after labor should be done if the tear was extensive. But without proper assistants, with poor light, to expose that cervix to see if it was lacerated, and then to repair it, was, he thought, accompanied by danger and students should not be taught to do it. One of the greatest sins in gynecology had to deal with the repair of a little bit of a laceration of the cervix. If a woman had a little nick in her cervix, with the squamous epithelium covering it nicely, with no subinvolution of the uterus, with no increase in menstruation or cervical catarrh, Dr. Cragin's practice was to leave it alone. These women did better without having their cervical canals narrowed and drainage interfered with.—N. Y. *Academy of Medicine—Medical Record*, June 16, 1907.

Board of Health of the State of New Jersey. Monthly Statement—June, 1907.

The total number of certificates of deaths received for the month ending June 15, 1907, was 2,705, a decrease from the previous month of 283, and a decrease from the average of the preceding eleven months (2,928) of 223. The deaths under one year numbered 434; over one year and under five years, 225; sixty years and over, 779.

Pulmonary tuberculosis caused 345 deaths, the number for the preceding month having been 359, and the average for the past eleven months being 303. Diseases of the nervous system—360—show a considerable decrease as a cause of death compared with the average (385) for the period mentioned.

Pneumonia—264—shows a slight increase over the average (255). The greatest mortality from this disease during the past year occurred in the months of February, March and April, the average for these months having been 435. During the months of August, September, October and November the average number of deaths recorded from pneumonia was 116, showing the very marked influence upon the prevalence and fa-

tality of this affection which is exerted by seasonal conditions. The infectious organism which most frequently causes pneumonia is usually present in the mouths of persons in normal health, and the prevailing opinion concerning the mode of infection in this disease is that irritation of the throat and bronchial tubes, due to the cold and changeable weather of winter and spring, afford an inviting culture surface for the pneumococcus, and therefore permit of the transplantation of the infective organisms from the mouth, where they appear to be at all times awaiting an opportunity to enter the tissues and develop. Slight congestion of the throat and lungs are therefore liable to be attended with an invasion of the micrococcus and other infectious bacteria.

The following shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending June 15, 1907, and also the number of deaths reported from certain selected diseases compared with the average for the previous eleven months; the latter are given in brackets: Typhoid fever, 30 (35); measles, 22 (10); scarlet fever, 24 (14); whooping cough, 15 (29); diphtheria and croup, 60 (55); malarial fever, 3 (3); tuberculosis of lungs, 345 (303); tuberculosis of other organs, 64 (47); cancer, 114 (115); cerebro-spinal meningitis, 30 (25); diseases of nervous system, 360 (385); diseases of circulatory system, 325 (204); diseases of respiratory system (pneumonia and tuberculosis excepted), 173 (176); pneumonia, 264 (255); infantile diarrhoea, 41 (197); diseases of digestive system (infantile diarrhoea excepted), 161 (189); Bright's disease, 204 (185); suicide, 37 (27); all other causes, 433 (582).

Food and Drugs.—During the month ending June 30, 1907, 311 samples were purchased for examination, under the direction of the State Board of Health, of which 17.5 per cent. were adulterated. We note of 214 specimens of milk, 31 were below the standard; 2 specimens of butter both below the standard; of cheese, 2 specimens, both above the standard, as were the 10 specimens of cream. Forty-three samples of water were analyzed, and 830 bacteriological examinations for diagnosis were made.

Licensed Health Officers and Sanitary Inspectors.—Under the provisions of chapter 215 of the laws of 1903 licenses have been issued to the following persons, all located in New Jersey except two cases noted:

HEALTH OFFICERS.

In 1904—Budd H. Obert, Asbury Park; Hiram Williams, M. D., Passaic; Alexander Marcy, Jr., M. D., Riverton; William S. Green, M. D., Paterson; Walter Taylor, M. D., Jersey City.

In 1905—Maria M. Vinton, M. D., East Orange; Edward Guion, M. D., Atlantic City; Fred W. Sell, M. D., Rahway; Howard L. Baumgartner, Asbury Park; Lewis L. Sharp, M. D., Palmyra; Ferdinand N. Sauer, M. D., Jersey City; George T. Tracy, M. D., Beverly; Chester H. Wells, Montclair; Duncan W. Blake, Jr., M. D., Gloucester City; Samuel D. Mayhew, M. D., Bridgeton; John O'Brien, Jr., Montclair; James A. Epton, M. D., Arlington; Frank H. Streightoff, Montclair.

In 1906—G. W. Fithian, M. D., Perth Amboy; Henry MacDonald, Newark; Leon R. Thurlow, Plainfield; Edward B. Rogers, M. D., Collingswood; J. I. Hoverder, M. D., Atco; W. U. Kurtz, M. D., Asbury Park; John K. Adams, M. D., Orange; William W. Brooke, M. D., Bayonne;

Henry D. Abbott, M. D., Bayonne; Thomas J. Duffield, Asbury Park; Eugene H. Sullivan, Orange; J. Aled. Browne, M. D., Paterson; Perkins Boynton, Little Falls; Ellsmore Stites, M. D., Bridgeton.

In 1907—Marcus W. Newcomb, M. D., Burlington; Charles P. Eaton, Jersey City; V. M. D. Marcy, M. D., Cape May City; Milton L. Somers, M. D., Atlantic City; Harry H. Pettit, M. D., Ridgewood; John T. Connelly, Bayonne; Charles J. Larkey, Bayonne; T. Lee Adams, Ocean City; R. H. Parsons, M. D., Mt. Holly; Jay E. Kilpatrick, Montclair; William Schluer, Orange.

SANITARY INSPECTORS—FIRST CLASS.

In 1904—Fred W. Hering, Jersey City.

In 1905—George W. Gilmore, Newark; Fred C. Robertson, M. D., Jersey City; John T. McClure, Harrison; John G. Taylor, Dover; Charles E. Bellows, Bridgeton; Albert E. Geissler, Kearny; Thomas S. Ainge, Lansing, Mich.; Charles S. Voorhis, Palmyra; Lewis E. Boutillier, Newark; Joseph C. Saile, Bloomfield; Casper Benz, Newark; Robert W. Meeker, Plainfield; John K. Bennett, M. D., Gloucester City; William H. Addis, Plainfield; William W. Heberton, M. D., South Orange; Eric Ordell, Newark; John Greaves, Jersey City; John E. Rowe, Summit; George N. Smith, Newark.

In 1906—Frank Dencklan, Plainfield; J. H. C. Hunter, Dover; Chauncey V. Bunnell, Jersey City; Charles F. Conrad, Newark; Percy W. Sipp, Newark; H. S. Winterhalter, Bayonne; W. J. E. Seder, Newark; Alonzo Brower, Freehold; Fred E. Wilson, Bayonne; David R. Thompson, Delaware City, Del.; Jay G. Foose, Montclair; William H. Lowe, Paterson; Charles W. Harreys, M. D., Ridgewood.

In 1907—Lynford E. Tuttle, Bernardsville; James L. Ollif, Plainfield; J. J. Reason, M. D., Carteret; Alfred C. Benedict, M. D., South Orange; John H. Winslow, M. D., Vineland; Harry R. Ingalls, Asbury Park; Edward F. Flynn, Newark; Elvia Scott, South Orange; Harris Day, M. D., Chester; A. I. Goehrig, Trenton; Harry E. Moffett, Newark; Irwin C. Dakin, Newark; William Gleuck, Jr., Newark; Fred S. Ball, M. D., Lakewood.

PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL ON PHARMACY AND CHEMISTRY.

(Continued.)

ESSENCE OF PEPSIN-FAIRCHILD.

A solution of the milk-curdling and proteolytic ferments of the gastric glands in a menstruum 18.5 per cent. of alcohol by volume.

Actions and Uses.—Essence of pepsin has the action of rennin and of pepsin and is recommended by the manufacturers for preparing milk for ingestion and in cases in which pepsin is indicated. Dosage—4 Cc. (1 fluidram) or more. Manufactured by Fairchild Bros. & Foster, New York.

EUFORMOL.

A solution said to contain in each 30 Cc. (1 fluidounce): Oil of eucalyptus, 0.025 Cc. ($\frac{3}{8}$ minim); oil of gaultheria, 0.018 Cc. ($\frac{3}{10}$ min.); thymol, 0.03 Gm. ($\frac{1}{2}$ grain); menthol, 0.005 Gm. ($\frac{1}{12}$ grain); boric acid, 0.78 Gm. (12 grains); fluid extract of wild indigo, 0.076 Gm. ($\frac{1}{14}$ min.); solution of formaldehyde (40 per cent.), 4.00 Cc. (60 min.).

Actions and Uses.—Euformol is a germicide,

antiseptic and deodorant. Dosage—For general use euformol should be largely diluted. Prepared by Parke, Davis & Co., Detroit, Mich.

EXODIN.

Exodin is a mixture of derivatives of rufigallic acid (hexahydroxy-anthraquinone). It contains diacetyl-rufigallic acid tetra-methyl ester, acetyl-rufigallic acid penta-methyl ester and rufigallic acid hexa-methyl ester.

Actions and Uses—Exodin is claimed to be a pleasant and reliable cathartic. It is said to produce a mild and protracted tonic effect on the digestive tract and to produce neither stomach pains nor colic. Dosage—For children, 0.5 Gm. ($7\frac{1}{2}$ grains); adults, 1 to 1.5 Gm. (15 to 22 grains). Exodin is sold in the form of a powder and in tablets, each containing 0.5 Gm. ($7\frac{1}{2}$ grains). Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

FIBROLYSIN.

Fibrolysin is a sterilized solution of a double salt of thiosinamine and sodium salicylate ($\text{NH}_2\text{CS.NHCH}_2\text{CH}:\text{CH}_2$) + $\text{C}_6\text{H}_4(\text{OH})(\text{COONa})$, containing 15 per cent. of the double salt.

Actions and Uses—Those of thiosinamine (which see), with the advantage of quicker absorption and freedom from pain or irritation, on account of its solubility and aqueous vehicle. Dosage—The contents of one vial (2.3 Cc. = 0.2 Gm. thiosinamin) by subcutaneous, intramuscular or intravenous injection; one injection being administered daily or every second or third day. Manufactured by E. Merck, Darmstadt (Merck & Co., New York).

HÆMOFERRUM.

Hæmoferum is a preparation of purified blood said to contain in each 30 Cc. (1 fluidounce), 2 Gm. (32 grains), of oxyhemoglobin in a menstruum containing 12.75 per cent. of alcohol.

Actions and Uses—It is claimed that hæmoferum acts as a preparation of organic iron (see Organic Iron). Dosage—4 to 8 Cc. (1 to 2 fluidrams) three or four times a day. Prepared by Frederick Stearns & Co., Detroit, Mich.

HEMOL.

Hemol is an organic iron compound produced from blood by reduction.

Actions and Uses—It is claimed to have the action of an organic iron compound. Dosage—0.12 to 0.5 Gm. (2 to 8 grains) in powder with sugar or in wafers. Manufactured by E. Merck, Darmstadt (Merck & Co., New York).

IODIPIN 25 PER CENT.

A preparation similar to the preceding, but intended for hypodermic administration.

Dosage—2 to 6 Cc. (30 to 90 minims) by hypodermic injection. This article is also marketed in the form of capsules, each containing 2 Gm. of iodipin 25 per cent. Prepared by E. Merck, Darmstadt. (E. Merck & Co., New York).

IODOFORMOGEN.

A nearly odorless mixture of iodoform and albumin.

Actions and Uses—Its action is that of iodoform, which is slowly liberated in connection with wound surfaces, making the action more persistent. It limits secretion, favors granulation and promotes drying. Iodoformogen is recommended as a dusting powder for ulcerated surfaces. Dosage—Being about three times as volu-

minous as iodoform, it is usually applied undiluted to the affected parts. It may be used as a snuff in ozena, mixed with an equal amount of boric acid. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

IODOTHYRINE.

Iodothyrene is a milk sugar trituration of the active principle of thyroid gland, 1 Gm. representing 1 Gm. of fresh gland and containing 0.0003 Gm. of iodine.

Actions and Uses—It is similar in action to Glandulæ Thyroidæ Siccæ, U. S. P., but it is claimed to possess the advantage of more definite strength and absence of decomposable extraneous matter. Dosage—Adults, 0.6 to 2 Gm. (10 to 30 grains); children, 0.3 to 1 Gm. (5 to 15 grains) per day. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York). E. Merck, Darmstadt (Merck & Co., New York).

IOTHION.

Iothion, $\text{CH}_2\text{I.CHOH.CH}_2\text{I} = \text{C}_3\text{H}_6\text{OI}_2$, is 1,3-diodo-2-hydroxy-propane.

Actions and Uses—Iothion acts like iodine and the iodides, but it is said to be rapidly absorbed by the intact skin. Dosage—It is applied in the form of a 25 to 50 per cent. ointment with mixture of equal parts of wool fat (lanolin) and petrolatum as a base. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

ISOFORM POWDER.

Isoform powder is a mixture of para-iodoxy-anisol, $\text{C}_6\text{H}_4(\text{OCH}_3)(\text{IO}_2)$ 1:4 = $\text{C}_7\text{H}_7\text{O}_3\text{I}$, an iodoxy-derivative of anisol, with an equal weight of calcium phosphate.

Actions and Uses—It is a germicide and antiseptic in consequence of its oxidizing power and, in contradistinction to iodoform, it acts not only in a medium free from oxygen, but in conjunction with free access of air. It is claimed to be non-toxic in comparatively large doses and to be absolutely non-irritant to the unbroken skin. It is recommended as a substitute for iodoform. Dosage—Internally, 0.65 to 2 Gm. (10 to 30 grains) per day. It is used externally as a dusting powder, as a paste with glycerin, as ointments, suspensions in glycerin, gauzes, etc., in strength varying up to 10 per cent. of pure isoform. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ISOPRAL.

Isopral, $\text{CCl}_3\text{CHOH.CH}_3 = \text{C}_3\text{H}_5\text{OCl}_3$, is 1,1,1-trichlor-2-propanol.

Actions and Uses—Isopral resembles chloral in its action, but is effective in smaller dose. It is prompt in effect and apparently devoid of cumulative action. It has some degree of local anesthetic power. It may be used as a substitute for chloral hydrate and is serviceable as an alternative in cases in which it is necessary to give hypnotics for a long time. Dosage—0.3, 0.6 to 1 Gm. (5, 10 to 15 grains) in capsules or wafers which should be dispensed in a well-stoppered glass vial. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

LAC BISMO.

A mixture said to consist of bismuth hydroxide and bismuth subcarbonate, suspended in water, in

a finely divided state, and containing 0.16 Gm. (2½ grains) of the salts in 4 Cc. (1 fluidram).

Dosage—4 to 16 Cc. (1 to 4 fluidrams) as directed. Prepared by E. J. Hart & Co., Ltd., New Orleans, La.

KASAGRA.

A fluidextract said to conform in drug strength to the requirements of the U. S. Pharmacopeia for fluidextracts. It is prepared with especial care, the drug being extracted with a menstruum containing no alcohol. The preparation is said to contain 0.05 per cent. of alcohol.

Actions and Uses—Kasagra is recommended as an especially palatable preparation of cascara, owing its laxative effects to this drug alone. Dosage—1 to 2 Cc. (15 to 30 minims) four times a day, half an hour before meals and at bedtime. Prepared by F. Stearns & Co., Detroit, Mich.

KOLA, STEARNS.

Each 30 Cc. (1 fluidounce) is said to represent 31 Gm. (480 grains) of fresh kola nut. It contains 23.5 per cent. of alcohol.

Actions and Uses—Kola seeds contain from 1.5 to 3.6 per cent. of total alkaloids, of which from 1-100 to 1-40 is theobromine and the rest is caffeine. About one-half of the caffeine is combined as kolatannate of caffeine. The actions and uses of the remedy are essentially the same as those of caffeine. It is probable that the kola-tannate is not so active as free caffeine. Dosage—2 to 4 Cc. (½ to 1 fluidram) three times a day. Prepared by Frederick Stearns & Co., Detroit, Mich.

KRESAMINE.

A clear watery solution of 25 per cent. of trikresol (which see) and 25 per cent. of ethylenediamine.

Actions and Uses—Kresamine is a powerful bactericide, with a claimed minimum of toxicity. It is said that the bactericidal effect of the cresol and its power of penetrating the animal tissues are greatly enhanced by the presence of ethylenediamine and it is claimed to be far less irritating when used as a wet dressing than other antiseptics. It is useful in all cases where an active

bactericide is required and particularly when the microbes are in an albuminous menstruum. The preparation is not so dangerous as carbolic acid. It has been recommended for the treatment of ulcers, eczema, lupus and other skin affections. Dosage—It is used only in dilutions (2 to 25) containing 2 per cent. or less of each of its active constituents. Kresamine may be applied in the form of ointment. A dilution containing 2 per cent. of each ingredient was formerly marketed under the name of "Ethylenediamine Trikresol Solution." This was used without dilution. Prepared by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

(To be Continued.)

Book Review.

DISEASES OF THE RECTUM: THEIR CONSEQUENCES AND TREATMENT. W. C. Brinkerhoff, M. D., Chicago. Orban Publishing Co., Chicago; \$2.00.

This little book contains many useful hints to the busy physician in his office treatment of rectal diseases.

PRIZE ESSAY NOTICE.

PRIZE ESSAY.—The subject chosen for this year's competition is "Feeding During the First and Second Years of Infancy." The condition of award of prizes—there are two offered this year—will be announced in the September JOURNAL.

We also defer to next issue an editorial in print on Typhoid Fever in the District of Columbia, based on Bulletin No. 35 of The Hygienic Laboratory, Washington, D. C., recently issued, in order to insert items received at a later date than is usually allowed for admission.

Committee on Publication.

WM. J. CHANDLER, *Chairman*, South Orange.....*ex-officio*
CHAS. J. KIPP, Newark.....Term expires 1908
ELLIS W. HEDGES, Plainfield....." " 1908

Committee on Scientific Work.

ELIAS J. MARSH, JR., *Chairman*, Pat'son Term expires 1910
NORTON L. WILSON, Elizabeth....." " 1909
TALBOT R. CHAMBERS, Jersey City....." " 1908

Committee on Credentials

DANIEL STROCK, *Chairman*.....Camden
ARCHIBALD MERCER.....Newark
THEODORE SENSEMAN.....Atlantic City

Committee on Honorary Membership.

H. GENET TAYLOR, *Chairman*.....Camden
ELIAS J. MARSH.....Paterson
LUTHER M. HALSEY.....Williamstown

Committee on Program.

WM. J. CHANDLER, *Chairman*, South Orange.....*ex-officio*
ALEXANDER MCALISTER, Camden.....Term expires 1908
FREDERICK F. C. DEMAREST, Passaic...." " 1909

Committee on Finance.

DAVID C. ENGLISH, *Chairman*.....New Brunswick
HENRY MITCHELL.....Asbury Park
WILLIAM ELMER.....Trenton
WM. J. CHANDLER.....South Orange

Committee on Business.

JOHN P. HECHT, *Chairman*.....Somerville
WALTER E. HALL.....Burlington
PHILANDER A. HARRIS.....Paterson

JAMES HUNTER, JR.....Westville
EMERY MARVEL.....Atlantic City

Committee on Prize Essay.

CHARLES J. KIPP.....Newark
DAVID C. ENGLISH.....New Brunswick
WILLIAM ELMER.....Trenton

Committee on Arrangements.

DANIEL STROCK, *Chairman*.....Camden
PAUL M. MECRAY.....Camden
JAMES MECRAY.....Cape May
VIRGIL M. D. MARCY, JR.....Cape May
ENOCH HOLLINGSHEAD.....Pemberton
HARRY A. STOUT.....Wenonah

Committee on Public Hygiene and Legislation.

L. M. HALSEY, *Chairman*, Williamstown. Term expires 1910
WILLIAM ELMER, Trenton....." " 1908
AARON K. BALDWIN, Newark....." " 1908
HENRY H. DAVIS, Camden....." " 1910
WILLIAM G. SCHAUFFLER, Lakewood...." " 1909
FRANK D. GRAY, Jersey City....." " 1909

Committee on Medical Defense.

WILLIAM G. SCHAUFFLER.....Lakewood
THOMAS N. GRAY.....East Orange
WILLIAM P. MELCHER.....Mt. Holly

Delegates to the American Medical Association.

ELIAS J. MARSH, Paterson.....Term expires 1908
CHARLES J. KIPP, Newark....." " 1909
LUTHER M. HALSEY, Williamstown...." " 1909

Alternate Delegates.

FRANK D. GRAY, Jersey City, and WM. S. LALOR, Trenton.

101

SUPPLEMENT TO THE JOURNAL OF THE Medical Society of New Jersey.

Vol. IV., No. 2.

Orange, N. J., August, 1907.

SUBSCRIPTION. \$2 00 PER YEAR

OFFICIAL TRANSACTIONS.

Minutes of the Proceedings of the Medical
Society of New Jersey at its 141st
Annual Meeting, held at the Hotel
Scarboro, Long Branch,
June 25, 26, 27, 1907.

Tuesday Morning, June 25th.
11:55 A. M.

MEETING OF THE HOUSE OF DELEGATES.

The meeting was called to order by the President, Dr. Alexander Marcy, of River-ton.

Dr. Marcy: Gentlemen, it is long past the time to begin, although the number of delegates registered does not reach that required; but in order to transact the business before us, we must begin. Therefore, I declare the one hundredth and forty-first meeting of the Medical Society of the State of New Jersey open.

The first business before the Society is the report of the Committee on Credentials, of which Dr. Daniel Strock is Chairman.

Dr. Daniel Strock, Camden: The Committee on Credentials report that nineteen delegates have registered, representing ten counties.

The Committee also report that all the counties, with the exception of two, made reports to the Secretary and Treasurer, in accordance with the provisions of the by-laws, one month previous to the meeting of this Society.

One of the two counties above mentioned, Atlantic, has subsequently met all the requirements of the by-laws; but the other, Hunterdon, has only paid six dollars to the Treasurer.

The Committee considers that the county societies of Atlantic and Hunterdon are delinquent and should be debarred from participating in the business of this meeting, unless relieved by action of the House of Delegates.

In the case of Atlantic County, the Committee recommend that this Society take immediate action and remove the disability.

Respectfully submitted,

(Signed) DANIEL STROCK, *Chairman.*

Dr. Marcy: Gentlemen, you have heard the report of the Chairman of the Committee on Credentials. What is your pleasure?

Moved and seconded that the report be received.

Dr. William J. Chandler: This report brings up a question which has been before the Society several times; and the Committee on Credentials declare Atlantic County delinquent, although it has several days ago satisfied all the requirements. I want to read the by-law on the subject and have a decision by the Society on that point.

"CHAPTER XII—ASSESSMENTS AND EXPENDITURES.

"SECTION 1. An assessment of two dollars per capita on the membership of the component societies is hereby made the annual dues of this Society, unless otherwise ordered by the Society. At least one month before the annual meeting of the Medical Society of New Jersey, the Treasurer of each component Society shall forward to the Treasurer of this Society the amount of its assessment with a list of the members who have paid their assessments and are otherwise in good standing.

"SECTION 2. Any component Society which fails to pay its assessments or to make the reports as required in this constitution and by-laws shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society (unless the disability be removed by the House of Delegates) until all requirements have been satisfied."

It has hitherto been held by this Society that if any component Society fails to pay its assessments, or if the Secretary fails to send in the four reports, it was suspended until the Society met; but that is not what the by-law says. It says that it is suspended until all the requirements have been satisfied. These had been satisfied in the case of Atlantic County before the Society met. They were discharged last week, and it then ceased to be suspended. If it had not paid its dues or made out its report, it would be the function of the House of Delegates to remove the suspension or not, as it chose.

If the Society had met two weeks ago, it would then have been in the power of the House of Delegates to remove the disability; but as soon as the assessments are paid and the four reports handed in, the by-law says that the requirements are satisfied. The interpretation is that the suspension then ceases. It is necessary that the Committee on Credentials, who have always ruled in accordance with a different interpretation, should receive instructions as to how to rule in the future.

Dr. Archibald Mercer, Newark, Treasurer: There is another by-law that says that all county societies shall pay their dues at least one month prior to the annual meeting. According to that by-law, the Committee on Credentials has declared both Atlantic and Hunterdon counties delinquent because they did fail to pay at the prescribed time.

Dr. Chandler: The by-law to which Dr. Mercer refers is the one which has just been read.

Dr. C. R. P. Fisher, Bound Brook: I think it would be in the power of the House of Delegates to remove that disability at this time, since Atlantic County has paid up. To bring the question before the house, I move that it be removed from suspension.

Motion seconded.

Dr. Marcy: Any remarks on the question?

Dr. Chandler: The question is not whether the House of Delegates has the power to remove the disability, but whether there is any disability existing at the present time in regard to Atlantic County. The Committee on Credentials rule that the disability exists. The by-law seems to allow the inference that the disability has already ceased and that there is nothing for the House of Delegates to remove.

Dr. Charles J. Kipp, Newark: I would amend it by moving that those members who have paid their dues be exempted from suspension.

Amendment seconded.

Dr. Mercer: Before the Society votes on it, I think that it would be necessary to know what members have paid. The Treasurer has received six dollars from six members, which is one dollar apiece. I have no evidence that they have paid any other money, and those who have paid but one dollar are still delinquent.

Dr. Marcy: The amendment will have to be ruled out of order.

Dr. Kipp: To the personal knowledge of Dr. Sproul, six men have paid their dues. I move that they be exempted.

Dr. Marcy: The Treasurer cannot accept Dr. Sproul's statement.

Dr. Mercer: It is not that I have any objection to accepting the statement of Dr. Sproul, but that it seems to me to be a loose way of doing business. We do not want to establish such a precedent.

Dr. Chandler: I should like to reënforce Dr. Mercer's statement by saying that no list of the members who paid the six dollars has been forwarded to the Secretary as required in the by-law. Hunterdon County has failed to pay its assessments and to send in the list of those who have paid. The assessment of this Society is two dollars for each member. Six dollars covers only three members' assessments. What three members have paid that amount we do not know. Hunterdon County is still delinquent; but Atlantic County, according to the proper interpretation of the by-laws, is not delinquent at the present time. For that reason, I would move to declare the first motion out of order.

Dr. Fisher: The President has ruled that the amendment is out of order.

Dr. Marcy: The question before the house is the original motion of Dr. Fisher.

Dr. Chandler: I move that Dr. Fisher's motion be declared out of order.

Motion seconded.

Dr. Kipp: I ask for the decision of the Chair on that point.

Dr. W. B. Johnson, Paterson: I rise to a point of order. A motion to declare a motion out of order is not a proper motion.

Dr. Marcy: The motion before the house is that the disability referring to Atlantic County should be removed.

Dr. O. H. Sproul, Flemington: Atlantic County is not delinquent. They have fulfilled the requirements.

Dr. Mercer: The money should have been paid in a month ago, but it came just in time for them to squeeze in; and it is proper for the house to move that they shall not be allowed to come in.

Dr. D. C. English, New Brunswick: It is a very important matter that we are deciding. We are establishing a precedent. There are two views to take. One is this: that they are delinquent until the House of Delegates removes the disability, as stated in the parenthesis. The other part of the by-law states that they shall be delinquent until they have complied with the requirements and paid over the money. They have done that, and consequently they cease to be delinquent. I hope this is the correct view; yet, let me suggest for your consideration,

is not that establishing a bad precedent? May not others fail to send in reports a month in advance and send them in two or three days before the annual meeting, thus making it utterly impossible for the Treasurer to get his report ready to present in time?

Motion put to a vote and carried.

Dr. Marcy: The disability of Atlantic County has been removed.

Dr. Chandler: Would it be proper now to bring up the question as to when the suspension of a Society ceases? Atlantic County can undoubtedly be excused by the House of Delegates at any time when it is in session; but the question is whether the county was delinquent just now when it was excused, or, in other words, whether it required any action of the House of Delegates to excuse it. The language of the by-law speaks of the assessment as being per capita, and then says:

"At least one month before the annual meeting of the Medical Society of New Jersey, the Treasurer of each component Society shall forward to the Treasurer of this Society the amount of its assessment with a list of the members who have paid their assessments and are otherwise in good standing."

This is one part of the chapter. The next part is the one that I have read already: when a Society fails to pay one month before the annual meeting, it is delinquent. How soon, then, can that delinquency be removed? We have always held that it could not be removed after that time, even though they paid their dues and sent in their report, until this Society met and acted on the disability. It was the intention of the framers of this article that it should have this meaning; but the by-law has been examined by a Justice of the Supreme Court of this state, and he decides that there is only one interpretation that can be put upon it, viz., that as soon as they do pay their assessments and send in their reports their suspension ceases. We should give due consideration to an opinion from such a source and seek to establish the correct interpretation of our by-law, so that it may not be misunderstood in the future.

Dr. D. C. English: I move that the matter be referred to the Board of Trustees.

Motion seconded and carried.

Dr. Alexander McAlister, Camden: There is a vacancy existing in Camden County's delegation, and the members request that Dr. P. M. Mecray be appointed to fill it.

Dr. Marcy: I announce the appointment

of Dr. Paul M. Mecray as an alternate delegate from Camden County.

Dr. Fisher: There is a vacancy in the delegation from Somerset County, and I request that Dr. Josiah Meigh, of Bernardsville, be appointed.

Dr. Marcy: Dr. Meigh is appointed alternate delegate from Somerset County.

The next business in order is the reading of the minutes of the last annual meeting.

Dr. Chandler began the reading of the minutes.

It was moved and seconded that the minutes as printed in the JOURNAL be approved. Carried.

Dr. Paul M. Mecray, Chairman of the Committee on Arrangements, read the report of that committee, as follows:

"In the latter part of May, the President of the Society and the Chairman of your Committee visited the new Cape May Hotel. It was then evident that the hotel would not be in readiness to entertain the Society. About the same time, the following letter was received from the proprietor of the hotel: 'Dear Doctor: It is with much regret that, owing to the severe weather of this past spring and labor troubles combined, we will be delayed in having the hotel turned over by the builders in the shape and manner that we should like to have it, in order to entertain the Medical Society of New Jersey at their coming convention. While we greatly feel the loss of this convention, we should rather the Society would have their first impression of our new hotel the most lasting, and we sincerely hope that you will accept our regrets and try to be with us in 1908.'

"With personal regards to yourself, and our sincere thanks to the doctors for their courtesy in this matter, we remain,

"Yours very truly,

"(Signed) JAS. P. DOYLE, Manager."

"The Trustees thereupon decided to hold the session at the Scarboro, Long Branch.

"The President added Drs. Forman, Warner, Shaw, Woolley and Bennett to the Committee of Arrangements. To these gentlemen, under the chairmanship of Dr. Bennett, credit for the local arrangement is due.

"They have provided a drive for the ladies for Wednesday afternoon, (carriages will leave the hotel at 3 o'clock), and a dinner for the Society and its guests at Pleasure Bay in the evening.

"Fifteen (15) exhibitors, contributing \$255 are expected to be present. Certain exhibitors who had engaged space at Cape May before the meeting of the American Medical Association decided, after that meeting, that they would reach the same doctors here that had already seen their exhibits at Atlantic City, and therefore gave up their spaces. Many others gave the same reason for not coming.

"(Signed) PAUL M. MECRAY, Chairman."

Moved and seconded that the report of the Committee on Arrangements be accepted. Carried.

Dr. Marcy: The next business is the election of Permanent Delegates. Nominations are in order.

Dr. Chandler: I move that the election be deferred. There are some candidates to be presented, but their credentials have not been examined.

Motion seconded and carried.

Dr. Marcy: The President has no committees to announce. The next business is the report of the Committee on Honorary Membership.

Dr. H. Genet Taylor, Camden, Chairman of the Committee on Honorary Membership, read the report of that committee, as follows:

To the Medical Society of New Jersey:

The Committee on Honorary Membership would respectfully report that the name of Dr. Albert Vander Veer, of Albany, N. Y., was proposed at the last annual meeting of the Society, for Honorary Membership and referred to this Committee.

Dr. Albert Vander Veer was graduated in 1862 at the National Medical College—now, Medical Department, George Washington University, Washington, D. C., with the Honorary Degree of M. D.; also received the Degree of M. D. at Albany Medical College, 1869; also the Degree of Ph. D. in 1882; also the Degree of LL. D. at Union and Hamilton College and George Washington University in 1904; was commissioned as Surgeon of the 66th New York Vols. and served during the Civil War; was Professor of General and Special Anatomy, 1869–82—Didactic, Clinical, Abdominal Surgery, 1882–1904, Dean of Albany Medical College, 1896–1905, and Surgeon-in-chief Albany Hospital; was President of the Medical Society of State of New York, and of the Surgical Association; has been member of the Board of Regents of the State of New York since 1895, a writer on Uterine Surgery and related subjects, and has contributed numerous other professional papers in medical society reports.

In consideration of the distinguished medical career during his life-work in the medical profession, as embraced in this report, your Committee take pleasure in recommending Dr. Albert Vander Veer as an Honorary Member of this Society.

H. GENET TAYLOR,
ELIAS J. MARSH,
LUTHER M. HALSEY,
Committee.

June 25, 1907.

It was moved and seconded that the report be received and its recommendations adopted. Carried.

It was moved and seconded that the Secretary be asked to cast a ballot for the election of Dr. Vander Veer, of Albany, N. Y., as an honorary member of the Society. This was done, and he was declared elected.

Dr. E. F. Denner, Paterson: I would request that, owing to the absence of Dr. Henry Kip, who was elected an annual dele-

gate, Dr. Frank B. Keller, of Passaic, be appointed in his place.

Dr. Marcy: Dr. Frank B. Keller is appointed.

There was no report of the Committee on Business, and no new business requiring early attention.

The report of the Committee on Program was read by Dr. Chandler, the Chairman of that committee.

REPORT OF COMMITTEE ON PROGRAM.

The Committee on Program desires to acknowledge its indebtedness to the Committee on Scientific Work for their valuable assistance in collecting the papers for this meeting. That committee is in a position early to ascertain from the writers of papers their preferences as to position on the program and the length of time they will consume in reading. They have accordingly sent in their report with such an excellent arrangement of the papers that but very little change was found necessary. If the length of the discussions and the presence or absence of the readers of papers could be equally prognosticated, the arrangement of the program would compare favorably with a railroad time-table in accuracy.

We have arranged to occupy the time allotted for the scientific sessions with the papers presented in the program. Several applications for position were made after the program was in press. An opportunity, however, may be given for these applicants to present their papers if there is any default by the scheduled readers or if there should for any reason be a surplus of time.

At our last meeting the Society authorized the discontinuance of the general distribution of the booklet programs, and in place thereof recommended the publication of the program in the JOURNAL. It has been so done this year. Several of our members have forgotten this change or have never noticed its recommendation. They have wondered why they did not receive the program and have written to know if it was printed. This is sad evidence that some of our members very carelessly read the "minutes" and are equally hasty in their perusal of the JOURNAL.

The expense to the Society of this plan is very much less. The ordinary cost of the programs, with wrapping, addressing and postage is about \$65.00. This year the cost of printing is \$30.75, the cost of addressing and mailing \$4.00, thus showing a saving of about fifty per cent. We mailed a limited number of the booklets to delegates, committeemen, secretaries of state societies, and to the guests of this Society. The continuance of this plan for another year will not again work the hardship of "hope deferred," and will probably stimulate a more careful perusal of the pages of our JOURNAL.

Respectfully submitted,
ALEXANDER MCALISTER,
FRED. F. C. DEMAREST,
WM. J. CHANDLER, Chairman.

It was moved and seconded that the report be accepted. Carried.

The report of the Committee on Scientific Work was read by the Chairman of that committee, Dr. N. L. Wilson, Elizabeth.

REPORT OF THE SCIENTIFIC COMMITTEE.**Dr. Norton L. Wilson, Chairman.***Mr. President and Members of the Medical Society of New Jersey:*

Your Committee on Scientific Work desire to take this occasion to thank the members who so promptly responded to the invitation to read papers. We have secured thirteen papers on various subjects with a symposium on diseases of the gall bladder, which will have five fifteen-minute papers, also a symposium on the eruptive diseases, containing four fifteen-minute papers, together with the address of the President and Third Vice-President and the Orations on Surgery and Medicine, making a total of twenty-four papers. Of the twenty-one counties in this Society we regret to say only eleven have reported to this committee. We would suggest that these reports be printed in full in the JOURNAL, as many interesting cases and much that interests the Society is there reported.

A full and complete report should be received from each component society. It is a record of their work. We would suggest that a uniform printed blank be sent to each reporter, asking him to fill it out and return to the Chairman of the Scientific Committee.

Abstracts of the eleven county reports are here-with appended.

Atlantic County sent in a report to the Chairman of the Standing Committee after the first of June and is not here abstracted.

Hudson County had a report in the JOURNAL and supposed she had done her full duty.

Bergen County. This Society is evidently enjoying prosperity. Several interesting papers have been read. In April, May and June of last year Scarlet Fever prevailed to a considerable extent in the eastern part of the county. There were many cases of Pertussis, Measles and Diphtheria throughout the county. The winter months were notable for much illness of a general nature. Cases of Grippe were numerous, and Pneumonia of a mild type prevailed, especially in children.

Burlington County. This Society is growing in membership, attendance and in general interest. Dr. I. D. Young, of Bordentown, died at the age of eighty. A few reform measures have been adopted, notably those pertaining to contract practice and life insurance. On January 9th they held their seventy-seventh annual meeting at Mount Holly. The wives of the Mount Holly members gave a light tea to the wives of the out of town physicians from 4 to 6.30. After the business of the meeting a banquet was served at which the ladies and several prominent gentlemen were guests. On February 18th Dr. McCormack visited them. The audience was not large but was an appreciative one. A committee was appointed to formulate plans for post-graduate instruction. The usual amount of Grippe. Whooping Cough and a slight epidemic of Diphtheria, together with a few cases of Typhoid and an increased number of criminal abortions were reported. Several interesting cases were reported.

Camden County. This Society closed its sixtieth year with seventy-nine active members. During the year six new members were added and two removed by death. Drs. O. B. Gross and Charles Wetton having died during the year. The Society endorsed the action of the Medical Council of the A. M. A. and pledged its support and aid to secure the passage of a bill to provide for

a department of public health, with representation in the Cabinet. The following sections were appointed for the year: Sanitary Science, Obstetrics, Pathology, Microscopy, Practice of Medicine, Surgery Gynecology. They all held interesting meetings at which good papers were read and discussed. Dr. McCormack had a large and appreciative audience, both in the afternoon and evening. They adopted his suggestion regarding a post-graduate course, which has been launched and promises success. Scarlet Fever and Diphtheria are more prevalent than in previous years. La Grippe was of rather mild type, but in some instances was followed by Pneumonia. An interesting account by Dr. Braddock, who has been in the Siamese Kingdom, is given in the report.

Essex County. This Society has done good work the past year. Four meetings have been held. Dr. McCormack was the speaker at the meeting held February 1st. Several eminent physicians have read papers before this Society this past year. Dr. C. R. Pettinger, Dr. D. M. Skinner and Dr. M. T. Gaffney were removed by death. Fourteen new members were elected. They adopted the broad policy of admitting to membership any legally qualified physician of moral and professional reputation. They adopted a resolution opposing the Osteopathic Bill.

Gloucester County had five regular meetings during the year, with several very interesting papers. They entertained Dr. McCormack on February 20th, who spoke to the profession in the afternoon and at a mass-meeting in the evening, before an appreciative audience. A committee was appointed to formulate plans to carry into effect his recommendations. La Grippe, Pneumonia, Pertussis, Tonsillitis, Parotitis, Measles, Scarletina and Varicella have been prevalent during the year, but there have been no severe epidemics.

Mercer County. At the July meeting they considered the position of Railroad Surgeon as being equivalent to contract practice, but amended their by-laws allowing him to do contract work. At the December meeting they approved the \$5 fee as the minimum in insurance examinations. They have had interesting and instructive papers and their social relations were strengthened by a banquet. Dr. Elmer Rogers died during the year. Dr. McCormack's visit was a profitable one. Resolutions were adopted condemning Senate Bill 469.

Ocean County. The Reporter regrets that the members are so widely scattered that it is difficult to get them together. Very little literary or scientific work is accomplished. The regular meetings were held. The membership remains the same. Dr. McCormack did not visit them because they could not get a large enough audience.

Passaic County has held eight regular meetings during the past year at which a number of interesting papers have been read. Their Legislative Committee secured their Senator and entire Assembly delegation to oppose the Osteopathic Bill. They seem to be particularly sensitive regarding the question of life insurance fees and by unanimous vote requested the Secretary to consign all such communications to the wastebasket. The membership shows a net gain of four, six having been elected and two dropped. Total membership ninety. In place of the May meeting they held a dinner, which was in every way a success.

Salem County held three meetings during the year, at which time interesting papers were read.

Dr. Marvel, their Councilor, visited them on February 6th. On February 22d Dr. J. N. McCormack very happily entertained a good audience. They have accepted the broad spirit of the profession and taken into their Society two members who were educated as Homeopaths, making a total membership of twenty-one. No epidemics have been reported.

Sussex County at their annual meeting May 20th reported there had been an unusual amount of sickness during the past year but no severe epidemics. Three new members admitted during the year and no deaths. The annual meeting was very interesting from a scientific and social standpoint. Dr. Harvey, their Councilor, was present.

Union County. Five new members have been elected; one death, that of Dr. W. Updyke Selover. (Since this report was made Dr. E. R. O'Reilly died of appendicitis, May 27th). Three were suspended for non-payment of dues; thus the membership remains the same as last year. Four regular and four special meetings were held during the year. On February 8th Dr. McCormack talked to the profession for a short time and then adjourned to a public hall where he addressed a mass-meeting. His talk was instructive and entertaining, and the Society are still considering his suggestions. Twice during the winter a delegation went to Trenton to help the Legislative Committee fight the Osteopathic Bill. Several excellent papers have been read and a number of interesting cases been reported. The usual number of cases of Scarlet Fever, Measles and Whooping Cough, together with La Grippe and Pneumonia, have prevailed, while Diphtheria has been almost epidemic.

Moved and seconded that it be received and its recommendations adopted. Carried.

The report of the Committee on Publication was read by Dr. Chandler, the Chairman of that committee.

REPORT OF THE COMMITTEE ON PUBLICATION.

At the beginning of the year, owing to the selection of Dr. D. C. English as editor, a vacancy occurred in our committee which was filled by the President in appointing Dr. E. J. Ill in the place of Dr. English. The meetings of the committee have been held monthly during the most of the year and have been characterized by the greatest harmony. The editor has been uniformly present and has aided with his advice and experience.

The committee has been indirectly interested in the printing of the annual program and more immediately in the preparation of the By-Laws in pamphlet form. This latter work has been completed except the part containing the fee table. This needs revision and the committee delayed the publication in order to ascertain the wishes of the Society and to receive its instructions.

The chief labor of the committee has been connected with the publication of the JOURNAL. Owing to the small annual assessment (\$1.00 for the past year) by the Society your Committee deemed it best to exercise economy in the expenditures for the JOURNAL. We therefore printed but few papers outside of those read at our annual meeting and at the meetings of the county societies. We refrained from making many excerpts from other journals and thus swelling the size of our

journal. Many editorials have been presented on topics occupying the minds of the medical profession. All the correspondence and news items obtainable by reporters and others in the different counties have been inserted, and we have sought in every way to make the JOURNAL a welcome messenger—bearing its monthly installment of the transactions interspersed with interesting communications from various parts of the state.

During the coming year the JOURNAL will be enlarged by increasing the number of pages of each issue. Our revenues will be sufficient to admit of this without embarrassment to the treasury. In this matter we shall need and expect the hearty cooperation of all members—each one making personal exertion to collect some item of interest, to give brief details of some unusual case, to collate hospital notes and in various ways add to the interest and value of *your JOURNAL*.

The financial report of the JOURNAL is more favorable than any hitherto made.

We have received from

Advertisers	\$1,150.22
Sales of JOURNALS and special subscriptions	18.43
The Treasurer for the JOURNAL account	1,751.15
	<hr/>
	\$2,919.80

We have paid

The Orange Chronicle Co.....	\$1,226.59
The Editor (9 months' salary).....	460.62
For sundries	93.23
	<hr/>
	\$1,780.44

A question often asked is, "What does it cost the Society to publish the JOURNAL?" also, "How does this expense compare with that formerly incurred in issuing the 'Transactions'?" We can ascertain that by the consideration of two totals in the cash book—the total amount received from the Treasurer for the JOURNAL account, and the total amount turned back into the treasury from the receipts of the JOURNAL.

We have received from the Treasurer for the JOURNAL expenses	\$1,771.15
We have returned to the Treasurer from the JOURNAL receipts	1,139.36
	<hr/>
	\$631.79

Net cost to the Society..... \$631.79
To this should be added about \$200.00 to cover the salary of the editor for the last quarter and to meet several small unpaid bills. This gives a total of \$832.00 as the entire cost to the Society for journalizing its transactions. The publication of the transactions formerly cost about \$1,000.00 annually (average cost for six years, 1897 to 1903, was \$973.00) and with the present increased cost of labor and materials it would probably amount to between \$1,000.00 and \$1,200.00. We are therefore on an economical basis in the present mode of issuing our transactions and to most of our members the new method is more acceptable.

Many of the older members are well aware of the fact that payment of their annual assessments includes payment of their subscription to the JOURNAL. But new members are not cognizant of this fact or if so they have an erroneous view of the period of time this subscription covers. One cause for this error lies in the varying periods at which the State Society, the JOURNAL and the county societies begin their fiscal years. The State Society begins its fiscal year with its annual meeting. The JOURNAL year begins on July 1st. The county societies hold their annual meetings

in different months from December to June inclusive. New members may come into the county societies almost any month in the year. They pay their dues, including the assessment for the State Society, to the Treasurer of the County Society. This puts them in good standing in the County Society for the County Society year.

The County Treasurer, however, does not immediately pay these assessments to the Treasurer of the State Society but holds them until one month before the annual meeting of the State Society and then pays them over with the other assessments for the coming year. Consequently the new member is, as it were, unknown and not in good standing in the State Society. He wonders why he does not receive his JOURNAL and why his name is not certified to the A. M. A. as a member in good standing in the State Society, while the State Society may have no knowledge of his membership in the County Society and has not received the assessment which entitles him to good standing. The situation would be less perplexing if all the county societies had a common date for their annual meetings, and if the State Society and the JOURNAL adopted a common date for the beginning of their fiscal years.

It is almost hopeless to expect that all the county societies will adopt the same month for their annual meetings, but it is perfectly feasible for the State Society and the JOURNAL to unite on a fixed date.

In order to remove some of the perplexities your committee would recommend that the fiscal year of the Medical Society of New Jersey begin hereafter on the first day of June of each and every year, and that the year of the JOURNAL coincide therewith. We would also recommend that the assessments collected from new members of component societies be forwarded immediately with their names to the Treasurer of the State Society in order that they may be entered on the mailing list of the JOURNAL and certified to the A. M. A. as members in good standing in the State Society.

We would still further recommend that new members coming into a County Society during the first six months of the State Society year (from June 1st to December 1st) pay the full assessment of the State Society for that year; and that members joining a County Society during the second six months (December 1st to June 1st) pay one-half of the assessment and receive the JOURNAL for the corresponding time.

Respectfully submitted,

CHAS. J. KIPP,
EDWARD J. ILL,
WM. J. CHANDLER,
Committee.

Moved and seconded that the report be accepted and its recommendations be adopted. Carried.

Dr. Luther M. Halsey, Williamstown: I should like to ask at this time the unanimous consent of the Society for the consideration of a matter which, as Chairman of the Committee on Hygiene and Legislation, I deem important. You all know of the serious illness of the Hon. Joseph Frelinghuysen, which, for a time, seemed likely to prove fatal. The Senator is now much better, but he is still ill at a hotel in Chicago.

At the last session of the Legislature he volunteered his services as the champion of any measure that the Society might wish, and I can say that I have always found him very willing to do everything he could. It was largely through his exertions that we have on the statute-books the present pure-food law and that the osteopathic bill was defeated. Therefore, I move that the Secretary be instructed to send a telegram to him at the Auditorium Hotel, stating that the Medical Society of New Jersey hopes and trusts that he will speedily recover.

Dr. English: I would not only support such an expression of sympathy, but would add that we appreciate his services.

Dr. Marcy: The motion as amended by Dr. English, if Dr. Halsey accepts the amendment, is before you.

Motion seconded. Carried. Secretary instructed to send the telegram.*

Dr. Thomas W. Harvey, Orange: In the absence of the Chairman of the Judicial Council, who has sent only a partial report, I move that the reading of the report be postponed.

Motion seconded and carried.

Dr. Chandler: I have here the report of Dr. Mary E. Gaston, of Somerville, a delegate to the Medical and Chirurgical Faculty of Maryland. I move that it be accepted and printed with the minutes of the Society.

Motion seconded and carried.

REPORT OF THE ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

The annual meeting of the Medical and Chirurgical Faculty of Maryland held in Baltimore April 23rd to 25th inclusive was productive of a number of valuable papers and of much interesting discussion.

The President, Dr. Hiram Woods, in his address on the "Medical and Chirurgical Faculty; Its Debt to Itself and the Public," laid special emphasis on the necessity of better relations between the profession and the lay press. He also advocated such changes in the medical laws of the state as would bring them in full conformity with the standard adopted by the American Medical Association.

Among other interesting papers was one read by Dr. Reik on the "Necessity for Surgical Intervention in the Treatment of Chronic Suppurative Otitis Media"; and one by Dr. Allen on "The Present Status of Vaginal Cesarean Section."

* The following is the text of the telegram:
To Hon. Joseph S. Frelinghuysen,
Auditorium Hotel, Chicago, Ill.

The Medical Society of New Jersey in annual meeting assembled send greetings.

We appreciate your services in behalf of scientific medicine and sincerely hope for your speedy restoration to health.

WM. J. CHANDLER, Sec'y.

Dr. Sanger's contribution on "Tonsillar Infections" provoked an animated discussion. "The Present Status of the Anti-tuberculosis Movement in Maryland" was given by Dr. Fulton, and "The Value of Laboratory Methods in the early Diagnosis of Gastric Carcinoma" was presented by Dr. C. Urban Smith. Dr. Young gave the diagnosis and treatment of calculus of the lower end of the ureter.

On the last day of the session there was a joint meeting of the faculty with the Maryland State Conference of Charities and the Maryland State Conference of Women's Clubs with the special object in view of instructing the public, in so far as it was there represented, in the dangers of the social evil and of urging the coöperation of the public in an organized campaign against it.

Dr. Prince A. Morrow, of New York, gave an address on the "Prophylaxis of Social Diseases." Dr. Lillian Welsh, of Baltimore, followed with a paper on "The Prophylaxis of Social Disease in the Home."

Dr. Emerson treated of the duty of the organized medical profession in fighting the social evil.

The interest aroused was evidenced by the earnest attention given by a large and intelligent audience.

Respectfully submitted,

MARY E. GASTON.

Somerville, N. J., June 24, 1907.

Dr. Marcy: The next business is the reception of delegates from other societies. If any are present we shall be pleased to receive them at this time.

No delegates were present at this time.

The report of the Committee on Prize Essay was read by Dr. Charles J. Kipp, of Newark, the Chairman of that committee:

"The Committee on Prize Essay would report that they have received two essays on Pneumonia, and that their unanimous decision is that the one under the nom-de-plume of E. D. Lowe is decidedly the better essay; but they exceedingly regret that they deem neither of the essays entitled to the prize, because they fail to meet the one important requirement of the prize-offer—originality of thought.

"Recognizing, however, the general excellence of the essay, that we have judged the better one, and believing that it very fully and tersely sets forth our present knowledge of and belief concerning pneumonia, we give it honorable mention; request a copy of it for publication in the JOURNAL and recommend that the Publication Committee present the author of it with two hundred and fifty or more reprints of the same.

"(Signed) CHARLES J. KIPP,
D. C. ENGLISH."

Moved and seconded that the report be accepted. Carried.

Dr. Marcy: This finishes the program for the morning. The Chair would like to announce that from this time on the sessions will begin promptly at the hours indicated on the program. A motion to adjourn is in order.

Motion made and carried at 12.45 P. M.

MEETING OF THE HOUSE OF DELEGATES.

*Tuesday Afternoon, June 25th.
3 o'clock.*

The invocation was offered by Rev. George L. Dobbins, of Long Branch:

Almighty God, our Heavenly Father, we recognize Thee as the source of our being and the giver of all our mercies, and are grateful. We thank Thee for the revelations of Thyself which Thou hast made in Thy written Word, in Thy works of creation, and redemption and providence, and in history. We thank Thee for all these blessings that Thou hast conferred upon the human family. We thank Thee especially that Thou hast been pleased to store away in the various laboratories about us, particularly in nature, remedies for those diseases that afflict us from time to time; and we thank Thee that Thou art giving to men wisdom to find these remedies and to apply them successfully. We thank Thee that Thou hast raised up men and women, and called and recognized them, to heal the body and care for it in the time of its affliction. We thank Thee, further, for the organization represented here this afternoon. We pray that while this anniversary service is being held, from this time forth, nothing may occur to mar its harmony or interfere with the wise plans that have been laid for it; and we pray that everything that does occur may redound to Thy glory and the good of those that are gathered here. May these men, who believe that in the multitude of councillors there is wisdom, and have found it demonstrated again and again, find it demonstrated anew in this anniversary visit. We ask these things, together with all needed mercies, through our Lord, Jesus Christ. Amen.

Dr. Marcy: It affords me a great deal of pleasure to introduce Mayor McFadden, of Long Branch, who will deliver the Address of Welcome:

Mayor McFadden: We desire to extend a hearty welcome to the Medical Society of New Jersey. We have a warm spot in our hearts for physicians, probably from a mere personal motive; for it is said that to the physicians of the State of New Jersey is largely due the success and the activity in building up one or two seaside resorts. We extend to you the freedom of the city during your stay.

Dr. Marcy: In behalf of the Medical Society of the State of New Jersey, it is my pleasure to thank you for the very generous and cordial welcome extended to us. I am quite sure that if Long Branch needs building up, we should be glad to have you invite the Medical Society of New Jersey to come here and build it up for you.

Announcement of the names of the Nominating Committee.

Dr. Chandler: I will read the names of those that have been reported: Atlantic County, Theodore Senseman; Bergen, Samuel Armstrong;

Burlington, Enoch Hollingshead; Camden, Dowling Benjamin; Cumberland, Ellsmore Stites; Essex, Archibald Mercer; Gloucester, H. A. Stout; Hudson, John J. Baumann; Mercer, William S. Lalor; Middlesex, Alfred L. Ellis; Monmouth, D. D. Hendrickson; Morris, John Walters; Ocean, William H. Schaffler; Passaic, B. L. Magennis; Salem, W. L. Ewen; Somerset, Aaron L. Stillwell; Sussex, B. W. Ferguson; Union, J. B. Harrison.

Dr. Mercer: I should like to state that there are two vacancies in the Hudson County delegation of permanent delegates. The names of two nominees have been forwarded by the Society.

Dr. Marcy: The election of permanent delegates was deferred for future action. It is proper to take it up now, if there are no objections.

Moved and seconded that the Society proceed to the election of permanent delegates. Carried.

Dr. Mercer: Hudson County has nominated Samuel A. Helfer and John C. Parsons, and Cumberland County presents the name of Dr. Ellsmore Stites, who has a certificate that does not exactly follow the wording of the form made out for the nomination of permanent delegates. There is no question but that he has been regularly elected from Cumberland County; and I do not think that he should be excluded because the exact wording has not been followed, since he is regularly elected to represent the Society.

Dr. Marcy: The constitution provides that permanent delegates shall present a certificate signed by the President and Secretary of the component Society and made out in the following form:

"This is to certify that _____, M. D., was nominated for permanent delegate to the Medical Society of New Jersey on the day of, 190 , by the component Society of the County of, according to the requirements of the Constitution and By-laws of the Medical Society of New Jersey."

It is very plain as to what the paper should be; and I think that it is a matter for the house to decide, whether they will accept a credential that has not followed that form.

Dr. Mercer read the credential of Dr. Stites.

Dr. Marcy: I think that it is within the province of the house to decide whether they will accept this.

Moved and seconded that it be accepted in the form in which it was read. Carried.

Dr. Marcy: Are there any other nominations for permanent delegates?

Dr. Walter B. Johnson, Paterson: I

should like to ask a question for information: If a permanent delegate of this Society becomes a Fellow may he resign as a permanent delegate and leave a vacancy which his component Society can fill?

Dr. Marcy: I shall refer the matter to our Secretary.

Dr. Chandler: I am glad that Dr. Johnson has brought up this question, because there is no provision made in our constitution on the subject of resignations. This is probably an oversight. It would seem that a resignation should create a vacancy, and that it would be competent for a component Society to select nominees to fill this vacancy; and while my impression is that this has been done in one or two instances, it would be well to have the Society express its opinion as a precedent for future action.

Dr. Johnson: I move that in case of the resignation of a permanent delegate, such resignation shall cause a vacancy, to fill which a nominee can be selected by the component Society to which he belongs.

Dr. ———: I should like to make an amendment by putting in the word death, making the phrase read: "death or resignation of a permanent delegate."

Dr. Chandler: Provision is already made for vacancies created by death.

Dr. Fisher: There is already a precedent on this question. In Somerset County one of the permanent delegates was elected an officer of the Society, and thereupon tendered his resignation as a permanent delegate, and his place was promptly filled. This was five or six years ago.

Dr. Johnson's motion was seconded and carried.

Dr. Johnson: I should like to resign as a permanent delegate.

Dr. Marcy: Please present your resignation to the Secretary in writing. It requires a three-fourths ballot to elect a permanent delegate.

Moved and seconded that the Secretary be instructed to cast a ballot for the election of all these permanent delegates. Carried. The Secretary was instructed to do so, and they were declared elected.

The report of the Recording Secretary was read by Dr. Chandler.

REPORT OF THE RECORDING SECRETARY.

There have been as usual many changes in the membership of the component societies owing to accessions, removals, deaths and resignations, and yet the total membership is not essentially changed numerically from that of last year. We then reported a membership of 1229. We now have 1232.

There are in several of the counties a large number of delinquents. This is an ominous condition. While it may be due to accidental or unpreventable causes it is suggestive of some internal defect in the component society. These societies are the foundation of the State Society, and while their attractiveness and effective activities depend very largely on the ability and energy of their secretaries, yet no one secretary can carry on his shoulders and infuse life and spirit into a moribund mass of formally organized entities, which can be aroused only once or twice a year to a semblance of vitality and then merely for the sake of exhibiting those signs of life necessary to retain their right to a legal existence. The County Society exists for a purpose. It has duties to perform—duties to its members, duties to the community in which it exists, as well as duties to the state organization of which it is a part. It is therefore appropriate for secretaries and members, as well, of component societies having but little community of interest and a large roll of delinquents to study carefully the causes of these conditions and seek to overcome them during the ensuing year.

The list of Permanent Delegates as made up for the Supplement to the August JOURNAL contained 113 names. We have lost one, Dr. Daniel M. Skinner, of Essex, by death. No other deaths have been reported and we had on our list at the opening of this session 112 names. There exist at present vacancies in most of the component societies. Camden, Cumberland, Cape May, Hudson, Sussex and Warren are entitled to fill vacancies. Bergen, Essex, Passaic, Sussex, Union and Warren will be entitled to select nominees next year, provided their membership does not diminish. Several other societies have so nearly the required membership that a few accessions at or before their next annual meetings will entitle them to select nominees to fill their vacancies.

The following Permanent Delegates have been absent from two consecutive annual meetings: Wm. S. Jones, Thos. S. B. Fitch, Wm. B. Graves, C. F. Adams, Samuel Johnson and F. W. Flagge. The Councilors report that satisfactory excuses have been received from all of these delegates, and their names are retained in the list.*

The inroads of death have been noted in the report of the Councilors, and yet it is not inappropriate to pass one more tribute to the memory of our late President. Great as is the loss to his community and to his medical confreres, the loss to this Society is equally great. A popular, lovable man, with quick perceptions, honest purposes, ability and willingness to work and in the prime of his manhood, Henry W. Elmer would have been a forceful character in any body of men, and his loss will be deeply felt by the Board of Trustees and the Fellows of this Society.

The conditions possible to result from the neglect of the secretaries or treasurers of component societies to make the reports and perform the duties required of them in the by-laws have excited considerable interest among our members and have given rise to differences of opinion. Questions of vital importance to the members of such societies were involved, and it was deemed advisable to obtain an unbiased and authoritative opinion. The following questions were submitted to the consideration of an eminent jurist—a member of our Supreme Court:

“(1). Can a component society which has not

met the requirements of the constitution and by-laws of the State Society regarding the payment of assessments and the making of reports be legally debarred from participating in the proceedings of the said State Society; and are the individual members of the component society thereby disqualified from performing their duties as officers or committeemen of the State Society?

“(2). Is a member of such debarred society who is a member of the American Medical Association, by reason of the payment of five dollars—annual dues thereto—and also by reason of maintaining good standing in his State Society, disqualified from performing any duties as an officer or committeeman of the American Medical Association during the period of such debarment?”

In answering a portion of these questions, the opinion states: “That the debarring of a component society for the fault of its Secretary or other officers, *prima facie* affected each of its members, so that he cannot as of right participate in state assembly; *but* that it was within the province of the state body upon ascertaining that no personal dereliction attached to such member, to consider him, by its action, as competent to act as if the local body, or its officials, had properly performed their duties toward him in his behalf. This power resides in the state body and owing to its peculiar provision for a vicarious penalty should be exercised.”

In answer to the question, “When does the ‘suspension’ begin and when does it terminate?” the reply, in brief, is that “The suspension begins with the date of the default and continues until the assessments have been paid and all reports sent in. It then terminates. The House of Delegates has the power to terminate it at any time, if it chooses.”

Answering all of these questions more fully, the opinion states: “Article IV of the constitution by section 1 provides that the whole Society shall be composed of ‘*members in good standing*’ of component societies.” By section 5 it provides that “all members of *component societies in good standing*” are constituted associate delegates, etc. The constitution therefore creates two criteria of good standing. In the one case it is the *member* who is to be in good standing; in the other it is the *component society*—a practically important distinction.

This distinction is apparently carried out in the by-laws. Chapter I Sec. 2, provides for the transmission by the County Secretary of four lists, the fourth of which concerns members who have paid *their* assessment and such list is made evidence of *their* right to register at the annual meeting. This section evidently applies to class one, created by Sec. 1 of Constitution Art. IV.

Chapter XII, Sec. 2, concerns “component societies” and hence applies to class two, created by Sec. 5, Constitution Art. IV, and is in the nature of a penalty rather than a qualification.

The result is that a *member* who is reported as having paid *his* assessment is entitled to register at the annual meeting and to whatever rights that implies, regardless of the rights that would accrue to him by reason of the Secretary’s having complied with Chapter XII, Sec. 2. If a member cannot claim this *individual* right either because he has not paid his assessment, or because his Secretary will not report that fact, he is relegated to his rights as a member of a component society, which he cannot successfully claim as long as his

*The corrected list now contains 115 names.

society is being disciplined for the fault of its Secretary.

In his relation to the American Medical Association, a member who is reported under Chapter I, Sec. 2, as having paid his assessment would be in good standing even though his *Society* was under suspension according to Chapter XII. My reason for saying this is that the National Body would not be likely to give any effect to a mere disciplinary penalty as affecting the substantial standing of an individual delegate. If therefore, even now (June 5) the Secretary of a component society will furnish a list of its members who have paid their assessments, such members would be entitled to whatever Chapter I, Sec. 2, confers upon them both in relation to the state and national bodies.

The proviso in this section as to "at least one month," is merely directory and the time as fixed may be waived.

The jurist adds this comment on Chapter XII: "The difficulty arises from your by-laws making a matter of substantial and individual importance to the members depend upon the technical observance of his duties by the Secretary or Treasurer. It is very much as if my right to vote for Presidential electors were made to depend upon whether the Treasurer of the Borough of Merchantville had properly accounted for my last year's taxes. In fact, it punishes me for his default and lets him go scot free."

In view of this the Justice suggests the following amendment to By-Laws, Chapter XII, Sec. 2: Strike out the first four lines and insert the following: "If the proper officers of any component society shall fail to pay over its assessments or to make reports as required in this constitution and by-laws, the President of such Society shall at once be notified of such default and, if at the expiration of one week from the mailing of such notification the default shall continue to exist, the said Society shall be held as suspended," etc.

This is an additional safeguard, although it does not entirely do away with its vicarious viciousness.

About one month ago it became necessary to change the place of holding the annual meeting. We met last year at Atlantic City and many members wish to meet next year at the new hotel in Cape May. It was desirable, therefore, to hold the present meeting in some central location more accessible to the members from the northern parts of the state. This precipitated a large amount of work upon the Committee of Arrangements. It was impossible to obtain any large hotel on the central seacoast. After the Board of Trustees decided on the location, the committee acted with great promptness and energy and to them are due the special thanks of the Society for the provision they have made for our comfort and entertainment.

While nothing of momentous import has occurred in the affairs of this Society during the past year, its influence has been exerted for the benefit of the people of this state in many ways. Let us strive during the coming year to be faithful to every duty, to improve every opportunity to advance the cause of scientific medicine and thus promote the welfare of this great commonwealth.

Moved and seconded that the report be received. Carried.

Dr. Marcy: Will you take any action upon the recommendations in the report?

The report of the Treasurer was read by Dr. Mercer.

REPORT OF THE TREASURER, 1907.

Dr. Archibald Mercer, Treasurer, in Account with the Medical Society of New Jersey.

CREDIT.

1906—

June 22—Burlington County, additional payment for 1906.....	\$3.00
June 22—Morris County, additional payment for 1906.....	3.00
June 22—Passaic County, for San Francisco fund	5.00
June 23—Hudson County, additional payment for 1906.....	1.00
June 23—Journal; sales, subscriptions and advertisements	558.21
June 25—Essex County, additional payment for 1906.....	1.00
July 2—Interest, bond No. Pac. Grt. North., C., B. & Q. Coll..	10.00
July 2—Interest bond, Chicago & Alton	17.50
July 3—Dr. E. Marvel, Committee of Arrangements, 1906....	55.75
Aug. 1—Interest, bond, N. Y. Central, Mich. Cent. Coll.....	17.50
Sept. 1—Burlington County, additional payment for 1906.....	8.00
Sept. 10—Essex County, additional payment for 1906	3.00
Oct. 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll..	10.00

1907—

Jan. 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll..	10.00
Jan. 1—Interest, bond, Chicago & Alton	17.50
Jan. 22—Hunterdon County, additional payment for 1906	1.00
Feb. 1—Interest, bond, N. Y. Central, Mich. Cent. Coll.....	17.50
Feb. 12—Subscription to Journal	2.00
April 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll..	10.00
April 17—Union County, additional payment for 1906	1.00
April 24—Committee on Publication—Journal	300.00..
May 31—Cumberland County, additional payment for 1906	1.00
May 31—Camden County, additional payment for 1906	1.00

June—

Bergen Co. assessment...	94.00
Burlington Co. assessment	60.00
Camden Co. assessment...	170.00
Cape May Co. assessment.	46.00
Cumberland Co. assessm't.	80.00
Essex Co. assessment.....	566.00
Gloucester Co. assessment	50.00
Hudson Co. assessment...	298.00
Mercer Co. assessment...	150.00
Middlesex Co. assessment.	76.00
Monmouth Co. assessment	76.00
Morris Co. assessment...	104.00
Ocean Co. assessment....	30.00
Passaic Co. assessment...	180.00
Salem Co. assessment....	42.00
Somerset Co. assessment.	48.00

Sussex Co. assessment....	36.00
Union Co. assessment....	164.00
Warren Co. assessment....	48.00
June 15—Committee on Publication—Journal	839.36
	<u>\$4,211.32</u>
Cash balance in bank June 13, 1906	3,183.41
\$1,000 bond, No. Pac. and Grt. No., C., B. & Q. joint 4s...cost.	\$972.50
\$1,000 bond, C. & A. 3½s...cost.	786.25
\$1,000 bond, N. Y. Cent., Mich. Cent. Coll. 3½s.....cost.	912.50
	<u>2,671.25</u>
	<u>\$10,065.98</u>

DEBIT.

1906—	
June 22—Dr. W. J. Chandler, Committee on Programme....	\$64.60
June 22—Dr. W. J. Chandler, Committee on Publication.....	124.56
June 22—Whitehead & Hoag, for Badges	27.58
June 22—Dr. A. Mercer, Treas...	14.39
June 25—Dr. E. Franklin Smith, Stenographer	65.00
June 25—Dr. J. R. Chambers, Chairman Scientific Committee	8.00
June 25—Dr. Daniel Strock, Corresponding Secretary	12.50
June 27—Dr. Frank Billings, Treas. A. M. A. for San Francisco Physicians	410.70
July 7—Dr. Philip Marvel, C'l'r.	24.73
July 7—Dr. W. A. Clark, C'l'r.	3.94
July 7—Dr. T. W. Harvey, C'l'r	5.50
July 7—Dr. W. H. Iszard, C'l'r.	4.70
July 7—Dr. W. J. Chandler, Committee on Publication.....	115.87
July 7—Dr. W. J. Chandler, Secretary	101.17
July 11—L. J. Hardham Co., Printing	11.25
July 11—Dr. R. C. Newton	141.79
July 23—Fidelity and Casualty Co., Treasurer's bond	15.00
Sept. 7—Dr. W. J. Chandler, Committee on Publication.....	134.90
Sept. 7—Dr. D. C. English, Secretary Board of Trustees....	5.75
Sept. 13—Dr. W. J. Chandler, Committee on Publication.....	180.13
Sept. 13—Dr. W. J. Chandler, Secretary	94.60
Oct. 20—Dr. W. J. Chandler, Committee on Publication.....	249.87
Nov. 21—Dr. W. J. Chandler, Committee on Publication.....	90.16
Dec. 19—Dr. W. J. Chandler, Committee on Publication.....	87.93
1907—	
Jan. 14—Dr. W. J. Chandler, Committee on Publication.....	281.27
Jan. 14—Dr. W. J. Chandler, Secretary	88.70
Feb. 23—Dr. W. J. Chandler, Committee on Publication.....	84.00
April 2—Dr. W. J. Chandler, Committee on Publication.....	103.81
April 18—Dr. L. M. Halsey, Committee on Legislation.....	450.00
April 26—Dr. W. J. Chandler, Secretary	79.01

April 26—Dr. W. J. Chandler, Committee on Publication.....	232.44
May 25—Dr. W. J. Chandler, Committee on Publication.....	86.19
	<u>\$3,399.44</u>
Cash balance in bank, June 17, 1907	3,994.67
\$1,000 bond, No. Pac. and Grt. No., C., B. & Q., joint 4s...cost.	\$972.50
\$1,000 bond, C. & A. 3½s...cost.	786.25
\$1,000 bond, N. Y. Cent., Mich. Cent. Coll. 3½s.....cost.	912.50
	<u>2,671.25</u>
	<u>\$10,065.98</u>

Respectfully submitted.

ARCHIBALD MERCER, *Treasurer.*

June 25, 1907.

Moved and seconded that the report be received and take the ordinary course. Carried.

Report of the Board of Trustees, read by Dr. Kipp.

Dr. Kipp stated that at a special meeting of the Board in July, 1906, Dr. David C. English was unanimously elected editor of the JOURNAL. Dr. English was at first quite reluctant to assume the responsibility, but after consideration consented, and has discharged his duties to the complete satisfaction of the Board.

That the Board reorganized June 24, 1907, by reelecting Drs. C. J. Kipp as chairman, and D. C. English, secretary. That the report of the Treasurer, showing balance on hand, cash \$3,994.67 and bonds, par value \$3,000, had been audited by Drs. Fisher and Johnson and was found correct.

That the report of the Publication Committee by Dr. Chandler, chairman, had been considered, and the trustees approved its recommendations as follows: That the JOURNAL be enlarged by increasing the number of pages; that the fiscal year hereafter begin on June 1st each year; that new members joining County Societies before December 1st pay \$2 assessment of State Society, and after December 1st \$1. The committee was directed to renew the contract with Dr. English as editor of the JOURNAL for the coming year and the thanks of the Board were extended to him for his services during the past year.

That the Trustees had heard and approved the report of Dr. Halsey, chairman Committee on Legislation, and most of the recommendations were approved and referred to the Society. That the committee had been authorized to employ an attorney if they deemed it necessary, and also to employ a man to watch legislation relating to medical matters and report to the committee.

That several amendments to the By-Laws were considered. The following were recommended to the Society for adoption: Those suggested by Judge Garrison, Dr. Ward's changing the quorum of the Society from twenty annual delegates to twenty members; also requiring reports of County Secretaries and Treasurers to be sent in two weeks before the beginning of the fiscal year.

That Drs. McGill, Ill and Chandler were appointed a committee to revise the fee bill rates.

That Drs. D. C. English, William Elmer, H. Mitchell and W. J. Chandler were reappointed as the Finance Committee.

Drs. C. J. Kipp, D. C. English and William Elmer were appointed as the Prize Essay Committee.

That the question had been considered "When does the suspension of a County Society that has failed to report cease?" and the Board decided, "When they had paid their assessment and sent in their reports to the Secretary."

That a special Advisory Committee was appointed to confer with the Committee on Legislation, when desired by them, with power to act for the Board in case of emergency. Drs. McGill, Godfrey and Marcy, with the President, were appointed.

That we offer two prizes for essays the coming year; for the best essay \$100 in cash, for the second best a gold medal of value of \$50. The Committee on Prize Essay was authorized to select the subject and announce the conditions of award.

That all the members of the Board of Trustees are present at this annual meeting but one who is detained by illness.

Moved and seconded that the report be received and approved. Carried.

Miscellaneous business was next in order.

Dr. English: I move that the recommendations of the report of the Recording Secretary be referred to the Board of Trustees with power to adopt the same, if they see fit.

Seconded and carried.

Dr. Chandler: I should like to introduce, in accordance with the recommendations adopted by the Society this morning, two amendments to the by-laws. The first is this: "Assessments for the current fiscal year of the Medical Society of New Jersey received by the Treasurer of a component Society from a new member or from a reinstated member shall be immediately forwarded to the Treasurer of the Medical Society of New Jersey; and no member shall be considered as in good standing in a component Society until his assessment for the current year of the Medical Society of New Jersey has been paid." This is to be inserted at the end of Section 1, Chapter XII.

The second amendment is to be added to Chapter XII of the by-laws as Section 3, and Section 3 will then become Section 4. "The fiscal year of this Society shall begin on the first day of June in each and every year. Each member received into a component Society between the first day of June and the first day of December shall pay the full assessment of the Medical Society of New Jersey for that fiscal year, but each member received between the first day of December and the first day of June following shall pay one-half of that assessment."

I should also like to introduce the amend-

ment suggested by Judge Garrison, which can be modified at the second reading by the Board of Trustees, if so ordered. That which I first read was the ending of Section 1, Chapter XII. In Section 2, strike out the first four lines, and substitute: "If the proper officers of any component Society shall fail to pay over its assessments or to make reports as required in this Constitution and By-laws, the President of such Society shall at once be notified of such default; and if, at the expiration of one week from the mailing of such notification, the default shall continue to exist, the said Society" shall be held as suspended, etc.

Dr. Marcy: Amendments to the by-laws may be made at any annual meeting by a two-thirds vote of the House of Delegates, if fifty members are present, and if the amendment has been twice read in open meeting and laid on the table for one day.

Dr. J. W. Ward, Trenton: In view of the fact that it is almost impossible to get a sufficient number of the Society together in the morning at the opening of the meeting, I would move this amendment to the by-laws: Chapter IV, Sec. 2, reads: "Twenty annual delegates, representing at least four component societies in good standing, shall constitute a quorum." We never can get that quorum together in the morning at the opening of our sessions. I shall, therefore, move this amendment: Strike out in the first line the words "annual delegates" and insert "members."

Dr. George E. McLaughlin, Jersey City: Owing to the absence of three of our annual delegates, our delegation has selected three alternates. I request that Drs. Aaron Friedman, John J. Baumann and J. G. L. Borgmeyer, of Jersey City, be appointed alternate delegates.

Dr. Marcy: These gentlemen are appointed as requested.

Dr. Mercer: I should like to present an amendment to Dr. Chandler's amendment to the by-laws. There is a by-law which requires that the assessments shall be paid by the component Society one month before the "annual meeting." I should like to have it made to read one month before the "beginning of the fiscal year." (Chapter XII, Sec. 1, seventh line.)

After some discussion as to the time of paying the annual assessments the matter was referred to the Board of Trustees for consideration.

Dr. Marcy: This amendment will then take the same course as the original amendment.

Dr. Harvey: The Chairman of the Judicial Council has asked me to present this report:

REPORT OF THE JUDICIAL COUNCIL.

To the Medical Society of New Jersey:

In presenting this our fifth report we have to regret its great length, but feel that the work of the past year could scarcely be summarized with less detail and at the same time be intelligible. The Council met in the early part of October and formulated certain recommendations, which were communicated to each of the component societies. In most of the societies the recommendations, or some part of them, have been adopted. These recommendations are as follows:

The Council unanimously endorses the recommendations made to the component societies in 1905 and 1906, and particularly urges the establishment of the same, wherever not at present a part of the program and practice of the society, and further asks the coöperation of each component society in the adoption of the following additional recommendations:

1. It is of great importance to the State Society to have an enrollment of all the practitioners of medicine in each councillor district, and particularly of those who are members of the regular profession, but are not yet members of the component societies; we, therefore, recommend that the secretary of each component society secure the names and addresses of these practitioners and also of practitioners of medicine of other schools, practicing in his respective county, and mail the same to the secretary of the Board of Councillors, at least sixty days before the next meeting of the State Society.

2. The insurance question is one of no small importance to the medical profession; your councillors, therefore, recommend that specific information, through the respective component societies in each district, concerning the charges made by different physicians for insurance examinations be *ascertained* and the same reported to the secretary of the Board of Councillors at least thirty days before the next stated meeting of the State Medical Society.

3. Each component society has its peculiar needs in respect to society affairs. Therefore, in so far as the Board of Councillors of the State Medical Society may be of benefit to the councillors or censors of the respective component societies in advancing and adjusting these matters, the former offers its assistance to that end and invites the councillors of the component societies to consider matters of society interests with them.

4. In view of the forthcoming itinerary of Dr. J. M. McCormack, who will visit the component societies in the State, each component society is requested to assist in arranging a State program. Your Board of Councillors recommend that the meetings begin in the northern part of the State and continue on appointed days, as will hereafter be determined. It is particularly requested that these meetings be arranged so that medico-social questions shall be fully discussed, and that leading citizens in their respective localities be invited and urged to be present. The advantage of such meetings is obvious to both the profession and the citizens of the community, when we consider that their purpose is to acquaint the public with the "health interest," and for the support of which physicians are endeavoring to secure proper legislation. The Board of Councillors particularly

asks that each component society give this matter careful consideration, and that each endeavor to make the meeting in its locality a success.

REPORT OF COUNCILOR FOR DISTRICT NO. 1.

In accordance with the resolutions passed at the meetings of the Council October 2, 1905, arrangements were made for Dr. McCormack's tour of the county societies. The first meeting was at Newark on February 1, 1907. Dr. McCormack visited every county in the State excepting Ocean and Monmouth. In many places two meetings were held, one for the public. The doctor's addresses were appreciated very highly by all who heard them.

Resolutions against contract practice were passed by Essex County, but nothing has been done to enforce them. In the Oranges, however, a paper was signed by all the legally qualified physicians, agreeing not to do contract practice. Three of the men who signed this agreement are supposed to have gone back on their word, and are working for the societies at the old rates. This matter is being investigated and when proven it is proposed to move against them in the county society. It is held that having signed the agreement willingly, their failure to keep their word disqualifies them from association with other physicians or membership in medical societies.

Respectfully submitted.

THOS. W. HARVEY.

June 1, 1907.

REPORT OF COUNCILOR FROM DISTRICT NO. 2.

Dr. Philip Marvel, Chairman of Board of Councillors, New Jersey State Medical Society.

Dr. Harvey requests me to send my report as councilor to you. I have very little to report. Although in touch with all the county societies in my district, I have during the last year only visited that of Passaic. I am informed that they are in a flourishing condition and are increasing in membership. During the visit of Dr. J. N. McCormack to this State, I arranged meetings of the county societies in Passaic, Bergen, Union and Hudson, which meetings were addressed by him.

Truly yours,

J. L. LEAL.

Paterson, N. J., May 31, 1907.

REPORT OF COUNCILOR FOR DISTRICT NO. 3.

Philip Marvel, M.D., Chairman of Board of Councillors, New Jersey State Medical Society:

I have visited the Hunterdon, Somerset and Mercer County Medical Societies during the past year and have nothing to report save that which is gratifying, encouraging and indicative of a progressive and united spirit. The changes from year to year in the societies of this Councilor district, looking toward the elimination of irregularities and the fostering and cultivation of a closer feeling of unity and fraternalism, have been markedly noticeable. Each of the meetings at which I was present was largely attended. The papers read and the subjects discussed were of an advanced and scientific character. It is the purpose of each of the societies to adopt, in whole or in part, the plan of University Extension teaching, to be inaugurated by the American Medical Association, and which has been brought to our attention by Dr. McCormack. Arrangements have also been made for the inter-visitation of members among the societies comprising this dis-

trict, each visitor to read a paper. My failure to visit the Middlesex County Society is due to the fact that I received no notice of the meeting. I will endeavor to obtain from the secretary a synopsis of the year's work, which I will forward later as a supplement to this report.

Respectfully submitted.

W. A. CLARK.

Atlantic City, May 16, 1907.

REPORT OF COUNCILOR FOR DISTRICT NO. 4.

Philip Marvel, M. D., Chairman of Board of Councilors, New Jersey State Medical Society:

As Medical Councilor of the Fourth District, I desire to report that the profession is more active and alive to the advancement of the higher, broader and more honorable principles of the calling than heretofore.

In the counties of Burlington, Monmouth and Ocean there are but very few, if any, cut-rate or contract doctors. In the county of Camden, "where the opportunities and incentives are so much greater and stronger," the few doctors that are doing a contract business are seriously debating with their own sense of dignity and honor about cutting loose from commercialism. In other respects the recommendations of the Judicial Council are being, to a greater or lesser extent, practiced. Dr. McCormack, "the exponent of the American Medical Association," was well and enthusiastically received in this district. His conversational talk with the doctors and his interesting and instructive talk to the public will be conducive of great good to both profession and people. As a result, in Camden County a post-graduate school has been organized, with a class of over twenty-five doctors, doing excellent work. With the influence of our society, the Freeholders of Camden County have raised the fee for examining the indigent insane from \$3 to \$5.

Respectfully submitted.

WM. H. ISZARD, M. D.

Camden, May 31, 1907.

REPORT FOR DISTRICT NO. 5.

I have visited all counties in the district except Cape May, and had arranged to be at the Cape May meeting in April, but was unavoidably prevented. Through correspondence and personal conversations with the members of Cape May Society, I am able to report that their meetings for the year, beginning June, 1906, and ending June, 1907, have been fairly well attended, and that the change to the quarterly meeting has been well received. As to Salem, Gloucester and Atlantic Counties, I believe each has made much greater progress from the program standpoint, and very much greater interest is shown in the individual meetings. I was present at only one of the Cumberland County meetings. The attendance was not up to what it should be in that county. While papers presented were interesting and timely, there did not seem to be the amount of interest taken in them that might have been, as there was no general discussion.

One of the interesting features of the year was the visit of Dr. McCormack, who was very well received in all of the districts, and in all of the counties with the exception of two, *viz.*, Ocean and Monmouth, where no meetings were held. It has been particularly gratifying to your councilors to note that much regret has been expressed in each of the districts that the attendance was not

larger, and solicitations have come to us through both professional and lay sources, asking that we arrange for the doctor to visit the State again at an early date. This of itself indicates that some good is developing from his itinerary.

Summing up the reports as given by the different councilors, and comparing them with those given the first year following the reorganization of our State Society, it is evident that our component societies have advanced socially, professionally and numerically. It is pleasant for your councilors to look back upon the past years and realize that some progress has been made. But in doing this we can not but regret that our recommendations have failed in some instances to receive the coöperation and support which we hoped they would. Whether the fault was ours, or was due to a misinterpretation of the recommendations or to indifference on the part of the societies, it is not our intention to ask, but we hope that each society may realize for itself that the efforts of the councilors, individually and collectively, have one object, namely, to effect an organization that shall promote the best interests of the individual and of this Society. We hope that some of the recommendations which have thus far failed of adoption by the component societies, may yet be received in spirit if not in form.

Your Council would recommend further consideration of the recommendations made before this Society at the meeting in 1906, that each society in some way best adapted to its own needs, adopt the recommendations of Dr. McCormack in organizing special work in each society. The details and directions can easily be left to those in authority in the society. No one can appreciate more the advantages to be derived than those who have already arranged and introduced the subject in their society. Atlantic and Salem Counties, to my personal knowledge, having adopted the suggestions, are greatly pleased with the results.

The Council would further report that they have considered the excuses offered by Dr. James Douglas, of Morristown. These excuses were sent to the Council, but never reached their destination, in consequence of which Dr. Douglas was last year dropped from the roll of permanent delegates. The Council would recommend that, if possible, Dr. Douglas be reinstated as a permanent delegate from the county of Morris.

Respectfully submitted.

PHILIP MARVEL, *Chairman.*

Moved and seconded that the report be received and its recommendations concurred in.

Dr. Marcy: Dr. Iszard's motion that the report of the Judicial Council be received and its recommendations concurred in is before the house. It is not possible to adopt all of these recommendations at once; therefore, it will be better to divide the motion. The Chair will entertain a motion that the report be received.

Motion made and carried.

Dr. Chandler: I should like very much to second the adoption of the last recommendation. I am much in sympathy with Dr. Douglas. I feel that he has been dropped through no fault of his own. He

sent excuses, which did not reach the Council. His name was reported as having sent no excuse; and, according to our by-laws, he was dropped. It is a question which the Society should consider well before deciding. The case will stand as a precedent.

Dr. ———: I should like to ask whether, his name having been dropped, there has been a recommendation of some other person to fill the vacancy.

Dr. Marcy: The Secretary can inform you.

Dr. Chandler: They have selected no nominee, as their quota is full.

Dr. Johnson: I move that Dr. Douglas be reinstated, as a permanent delegate, from Morris County.

Motion carried.

The amendments to the by-laws were then passed to a second reading.

Dr. Marcy: A motion to lay on the table is in order.

Dr. Chandler: I move that the amendments to the by-laws be laid on the table for one day.

Seconded and carried.

Dr. Marcy: Is there any further miscellaneous business?

Dr. Chandler: I have here the resignation of Dr. W. B. Johnson, a permanent delegate to the Medical Society of New Jersey:

"To the Medical Society of New Jersey:

"I hereby tender by resignation as a permanent delegate to the Medical Society of New Jersey representing Passaic County.

"(Signed) WALTER B. JOHNSON.

"June 25, 1906."

Moved and seconded that the resignation be accepted. Carried.

Dr. Marcy: A motion to adjourn the House of Delegates is in order.

Moved and seconded that the House of Delegates adjourn. Carried.

Adjourned at 4.15 P. M.

MEETING OF THE HOUSE OF DELEGATES.

Wednesday, June 26, at 3:15 P. M.

The report of the Nominating Committee was read by Dr. D. C. English, the Secretary of the Committee, as follows:

The Committee met June 25th at 5 o'clock P. M. Dr. Luther M. Halsey was elected Chairman, and Dr. D. C. English, Secretary. After the presentation of candidates for the various

positions the following were unanimously nominated:

President—DR. EDWARD J. ILL, Newark.

First Vice-President—DR. DAVID ST. JOHN, Hackensack.

Second Vice-President—DR. BENJ. A. WADINGTON, Salem.

Third Vice-President—DR. THOMAS H. MACKENZIE, Trenton.

Corresponding Secretary—DR. DANIEL STROCK, Camden.

Recording Secretary—DR. WILLIAM J. CHANDLER, South Orange.

Treasurer—DR. ARCHIBALD MERCER, Newark.

Councilors—First District, DR. THOMAS W. HARVEY, Orange; Second District, DR. JOHN L. LEAL, Paterson; Third District, DR. WILLIAM A. CLARK, Trenton; Fourth District, DR. WILLIAM H. ISZARD, Camden; Fifth District, DR. PHILIP MARVEL, Atlantic City.

Committee on Publication—DR. CHARLES J. KIPP, Newark; DR. ELLIS W. HEDGES, Plainfield.

Committee on Scientific Work—DR. ELIAS J. MARSH, JR., Paterson.

Committee on Program—DR. F. F. C. DEMAREST, Passaic.

Committee on Public Hygiene and Legislation—DR. LUTHER M. HALSEY, Williamstown; DR. HENRY H. DAVIS, Camden.

Committee of Arrangements—DRS. DANIEL STROCK, Chairman, Camden; PAUL M. MECRAY, Camden; JAMES MECRAY, Cape May; ENOCH HOLLINGSHEAD, Pemberton; VIRGIL M. D. MARCY, JR., Cape May; HARRY A. STOUT, Wenonah.

Delegates to the American Medical Association—DRS. CHARLES P. KIPP, Newark; C. R. P. FISHER, Bound Brook. Alternates—DR. F. D. GRAY, Jersey City; W. S. LALOR, Trenton.

Delegates to the New York State Medical Society—DRS. W. J. CHANDLER, South Orange; WILLIAM ELMER, Trenton; D. C. ENGLISH, New Brunswick; P. A. HARRIS, Paterson; B. D. EVANS, Morris Plains.

To the Pennsylvania State Medical Society—DRS. W. B. STEWART, Atlantic City; H. A. STOUT, Wenonah; W. E. DARNALL, Atlantic City; L. M. HALSEY, Williamstown; ALEX. MCALISTER, Camden; D. BENJAMIN, Camden.

To the Massachusetts State Medical Society—DRS. N. L. WILSON, Elizabeth; G. K. DICKINSON, Jersey City; E. B. SILVERS, Rahway; JAMES HUNTER, JR., Westville; J. P. HECHT, Somerville.

To the Rhode Island State Medical Society—DRS. CALVIN ANDERSON, Madison; F. W. PINNEO, Newark; W. H. SHIPPS, Bordentown.

To the Connecticut State Medical Society—DRS. S. A. HELFER, Hoboken; A. L. ELLIS, Metuchen; A. L. STILLWELL, Somerville.

To the Maryland State Medical Society—DRS. H. G. NORTON, Trenton; W. G. SCHAUFFLER, Lakewood; EMMA M. RICHARDSON, Camden.

To the Southern Surgical Association—DRS. EMERY MARVEL, Atlantic City; F. M. DONOHUE, New Brunswick; PAUL M. MECRAY, Camden.

To the New Jersey Pharmaceutical Association—DRS. H. L. COIT, Newark; F. M. CORWIN, Bayonne.

The Committee makes the following recommendations:—

That the President be empowered to appoint, as delegates any members of our Society who shall signify their willingness to attend the annual meeting of any medical organization not specified above.

That the next annual meeting of the Medical

Society of New Jersey be held in the Hotel Cape May, Cape May City, and that the time of said annual meeting be June 23, 24, 25, 1908.

Respectfully submitted,

L. M. HALSEY, Chairman.

D. C. English, Secretary.

Long Branch, June 26, 1907.

Moved and seconded that the report be received. Carried.

Moved and seconded that the Secretary be authorized to cast a ballot for the election of officers, committees and delegates, there being only one nominee for each place. Carried.

Dr. English:—That does not carry with it the recommendations; only the election of the nominees?

Dr. Marcy:—It does not include the recommendations.

The ballot was cast, and the officers, delegates and committees as above named, were declared elected.

The recommendations of the committee were then read by Dr. English.

Moved and seconded that the first recommendation be adopted. Carried.

Dr. English:—The next recommendation is that the next annual meeting of the Medical Society of New Jersey be held at the Hotel Cape May, Cape May, June 23, 24 and 25, 1908.

Moved and seconded that this recommendation be adopted. Carried.

The report of the Committee on Hygiene and Legislation was read by Dr. Halsey, the Chairman of that Committee.

To the Medical Society of New Jersey:

Your Committee on Legislation beg to make the following as a report of their work during the past year, and with it a synopsis of what we were able to accomplish, and what legislation we succeeded in putting a check upon. While all of us invariably fall below our ideals, we are satisfied that the work during the session of 1907 has not been in vain, as we were able to prevent the passage of any osteopathic measure, and at the same time to explain the vicious character of the legislation demanded by the osteopaths; that we are sure that many members are thoroughly convinced that the passage of any bill which would give the osteopaths the right demanded, would be a decided retrograde movement and a step backward in the progress made by New Jersey in establishing a high medical standard.

We wish to take this opportunity to personally thank Senator Frelinghuysen for his untiring devotion to the interests of the medical profession of the state. At the conference held in the summer of 1906 the Senator placed his services at the disposal of the profession, and informed the Chairman of your Committee that he would introduce any measure which we advocated and oppose any bills which might be introduced which were detrimental to the best interests of the physicians of New Jersey. So loyally did he carry

this out that when your Committee called upon the Senator, after a conference with the osteopaths, and informed him that we were willing to make certain concessions recognizing their cult, the Senator very decidedly informed us that if we proposed for one moment to give the osteopaths the right to issue birth and death certificates that we might look for some one else to be our sponsor in the Legislature, as he would not be a party to anything which lowered the high standard of medicine in New Jersey to-day, and which ultimately might have a very great effect upon humanity at large. Such a man would be an ideal Governor of the state from a medical standpoint; we know that he would always be a strong bulwark to prevent the enactment of many vicious measures which are annually introduced into the Legislature. We all should be proud that we have such a man who is broad minded enough to see that the medical profession is laboring for the best interests of humanity.

We have now upon the statute books of the state of New Jersey a Pure Food Act which is almost identical with the National Pure Food measure, and while it is not perfect, and is susceptible of several changes which will materially strengthen it, yet we think all should feel proud of its passage, and the Senator from Somerset county should have unstinted praise for his exertions in placing this measure upon the statute books of the state.

Your Committee arranged with the legislative committee of the New Jersey State Pharmaceutical Society to meet in Trenton to take up the matter of a Pure Food Law—inviting the representative of the State Board of Health to be present so that in the construction of the bill all points could be covered, and not conflict with the laws already upon the statute-books. A representative of the Attorney General's office was also present. The matter was discussed in general and a plan mapped out, and a meeting called for a certain date. At the meeting we found that the matter had entirely been taken out of our hands, and the Attorney General's representative had constructed a bill along the lines laid down by the State Board of Health to which the State Pharmaceutical Society took many objections, and from that fact we believe responsible for a better bill than the present one not being on our statutes. At the same time bringing to their aid the different manufacturers of food products, they believing in their judgment some practical men should be added to the Board of Health along these lines for the better protection of the public and all concerned.

It gives to any association of three or more physicians in any county of the state, who will give sufficient bonds, the right to unclaimed bodies except those of strangers for the purpose of dissection.

The expense of the transfer of these bodies is to be borne by the association and not by the state. These associations may get material from adjoining counties in case no society exists there, and if two or more societies exist in one county they must take their turn in receiving material.

Several other bills of minor importance were looked after by your Committee, and some bad measures were disposed of in Committee, but the main work of the session has been devoted to the Osteopath Bill and the passage of the Pure Food Act.

Your Committee felt from reports that came to them that there was a possibility of our work

being very light, owing to the fact that information was received that the osteopaths did not propose to make any fight for legislation during the year 1907. This information was entirely wrong, as in February they introduced a bill into the Senate, known as Senate Bill No. 146. This was referred to the Committee on Miscellaneous Business, the chairman of which committee was very favorable to the bill. So rapidly had they intended pushing this measure that a time was set for a hearing, and no notice given to the medical profession, it being purely accidental that the day set for a hearing was found out. * * * * *

* * * * * Strong pressure was brought to bear upon Senator Brown to postpone the hearing until such a date that we would be able to have a good representation of the medical profession in opposition to it. Each County Medical Society was notified to bring all the pressure they could to bear upon their Senators asking for the postponement of the hearing, and if possible to have the bill disposed of in committee. At the hearing our side was represented very ably, and the osteopaths had a good representation. We were informed by Senator Brown that he was in favor of either reporting the bill, or having the medical profession and the osteopaths hold a conference and decide upon a substitute, which measure he would report and use his exertions to have passed by the Senate. We continued to bring all the pressure to bear we could upon Senator Brown not to report the bill, and owing to the fact that the osteopaths made frequent unreliable statements to him, he decided to hold off for a time and not report the measure.

The osteopaths, finding that their game was blocked for a time, suggested that a conference with the Committee on Legislation would be agreeable to them. The conference was called, and a bill was offered by the medical profession which made all the concessions to the osteopaths which we felt that we could do, but they refused to accept. This bill, Senate Bill No. 302, was introduced by Senator Frelinghuysen and referred to the Committee on Miscellaneous Business. Senator Brown then refused to report either No. 146 or No. 302.

Notwithstanding the fact that the osteopaths had made a positive promise to your Committee that they would take no steps towards any legislation until their answer had been given to the committee as to the acceptance or non-acceptance of Senate Bill No. 302, they immediately introduced into the House, through Mr. Lane of Essex, House Bill No. 469, which was referred to the Committee on Miscellaneous Business and reported favorably by Chairman Tumulty. On second reading we succeeded in having this bill so amended that it was not at all acceptable to the osteopaths, and finally they abandoned it altogether. They were not willing to accept any measures which did not give them all the rights and privilege of physicians in the matter of birth and death certificates and in the general supervision of public health, and all the rights which are now held by regular licensed medical men in the matter of contagious and infectious diseases; showing plainly that it was not their desire to be legalized as osteopaths and to prevent the practice of irregular practitioners of that cult, but that they wanted all the rights and privileges of physicians without being subjected to the same regulations. This we have been fully familiar with for a long time, but their argument has been that they wanted to raise to a higher plane

the practice of osteopathy, and to keep men from practicing in this state who were graduates of correspondence schools and schools giving a very limited course. * * * * *

The Committee on Legislation then had a bill introduced in the Senate by Senator Frelinghuysen, known as Senate No. 354, and referred to the Committee on Militia, of which he is chairman. This was quickly reported, and owing to a slight technical error which was discovered by Senator Avis, it was passed on third reading by vote of twelve to seven. That it may be of assistance to us in the future, I will give a list of those voting for and against our bill in the Senate:

For—Avis, Bradley, Frelinghuysen, Cornish, Gebhardt, Hillery, Hinchliffe, Minch, Plummer, Price, Robbins, Shinn.

Against—Ackerman, Brown, Colby, Hand, Hutchinson, Lee, Silzer.

Absent—Minturn. (He would have voted with us if he had been present.)

Present, but not voting—Wakeley.

This bill was immediately sent to the House and was referred to the Committee on Miscellaneous Business, and notwithstanding that we had the positive assurance of the chairman and the majority of the committee that the bill would be reported as passed by the Senate, this was not done. Very positive evidence is in the hands of your committee that this bill was stolen by two politicians from Essex county and disposed of. * * * * *

Your Committee worked very hard at this session in trying to pass a measure which would be acceptable to the medical profession of the state, but owing to the fact of the two houses of the Legislature being of different politics, and that an active canvass of the members in the upper part of the state had been made by the osteopaths, we were satisfied that it would be a very difficult matter to enact any legislation which would be acceptable to them.

It is only more convincing to your Committee, and impresses the fact more favorably upon us, that there must be more hearty coöperation of the medical profession in the future. If one hundred osteopaths can succeed in so impressing the members of the Legislature that they should be recognized and have practically all the rights and privileges of physicians, what would we not be able to accomplish with almost four thousand members, if the same energy was used by us all.

Owing to the fact that your Committee was instructed by the State Society at its last session to fight the osteopaths to the bitter end and not to make any concessions whatsoever, we were somewhat hampered in developing a plan of campaign which would result in some good.

At a conference in which practically every County Medical Society in the state was represented, it was decided to introduce a bill which was known as Senate Bill No. 302. This bill was drawn by a lawyer employed by the Union County Medical Society, and with some minor changes was adopted, practically unanimously by those present, and offered to the osteopaths in good faith. * * * * *

As your members of the Legislative Committee are on the field of action and have made a careful and close study of the conditions which are present, they should be given entire charge of all matters of this character. It is necessary to act quickly on matters which are pending, and if

left to a conference an opportunity to accomplish results would be lost.

* * * * *

At this session of the Society the term of the Chairman of the Committee on Legislation expires. He wants the Society to feel perfectly free to elect any one to take his position. He has labored to the best of his ability to thoroughly organize the state, and while much has been accomplished it has fallen far short of the standard which he established. In all probability there is some member of the Medical Society of New Jersey who would be able to develop more enthusiasm and get a greater amount of concentrated work and action from the several county medical societies.

While the Chairman feels that there is a duty which he owes to the Medical Society of New Jersey for the repeated honors which they have bestowed upon him, honors which he feels at times have hardly been justified, and for which he is willing to labor and do all that is possible for the unification of the medical profession, yet he does not feel that it would be right to stand in the way of other men in the state who may have much greater ability, who would be perfectly willing to devote their time to the service of our noble profession and who will be recognized.

The Committee on Legislation have some recommendations for your consideration: That in the future the Committee should be composed of four, or at the most five members, with the adjunct of the Auxiliary Legislative Committee. If the committee is larger, it is likely to be unwieldy. They should have full power to act for the State Society in all legislative matters. We further suggest that it would be well for each County Medical Society in the state, either through their Committee on Legislation or a special committee appointed for that purpose, to take up the work of educating the public at large as to the absolute necessity of physicians having the entire supervision over medical and sanitary matters. Their unselfish devotion to the eradication of diseases in the past is positive evidence of their good intent for the future. By timely articles in the newspapers, by lectures delivered by some of the members of the county societies or persons whom they may select, to which the public are invited, much will be done towards changing the sentiment throughout the state.

* * * * *

As there are so many emergencies which arise that call for speedy action, it is absolutely necessary in our judgment that your Committee should have unlimited power to do what they deem best in any emergency. You may rest assured that nothing will be done that will be derogatory to the profession.

* * * * *

Senate Bill No. 83 was passed by both houses and signed by the Governor and is now the law.

A loyal supporter of the medical men of this state, Dr. Edw. E. L. Haines, will this year retire from the Legislature. Through his exertions more than any other one man we were able to control vicious legislation at the 1906 session of the Legislature. In many counties there are medical men who are thoroughly capable of filling the position as members of the Legislature, and we would suggest that this matter be taken up by the different County Medical Societies looking to the possible making of several members of the medical profession for the com-

ing session of the Legislature. If we have several physicians in the Legislature their advice will be sought, and they will be able to help control many bad measures which are introduced.

The Chairman of the Committee wants to personally thank his associates for the untiring assistance which they have given him during the past year. We have been an exceedingly harmonious body, and have worked together for what we deemed the best interests of the medical men of New Jersey.

The Chairman of the Committee desires to express his thanks to Dr. Henry H. Davis for his work as Acting Chairman of this Committee during sickness of the Chairman. He acted for him at hearing before the Senate committee. He was present frequently at Trenton and was very earnest in upholding the medical society of the state and in looking after all matters in which we were interested. Doctors F. D. Gray, William H. Schauffer and A. K. Baldwin did heroic work for the committee.

We would fail in giving honor where it is due if we did not mention the work of Drs. John W. Bennett and John J. Baumann for the State Board of Medical Examiners.

To the counties of Union, Hudson, Somerset, Camden, Burlington, Atlantic and Gloucester a special acknowledgement is made for the very great assistance they have been to the Committee on Legislation. These, in our judgment, should be placed on the roll of honor, and if they are published in the JOURNAL of our Society it may go far toward stimulating others to follow their example.

* * * * *

Dr. F. D. Gray, of Jersey City, was unfailing in his exertions to accomplish certain results in Hudson county.

The Chairman wishes to personally thank the members of the medical profession in the state for the confidence which they have reposed in him. Let us all determine that another year we will do better work; we will have more systematic and thorough organization; we will let it be known throughout this broad land of ours that the Medical Society of New Jersey has the best and most thorough organization in the United States.

Moved and seconded that the report of the Committee on Hygiene and Legislation be received. Carried.

Dr. Dowling Benjamin, Camden:—I would move that the committee be empowered to use its best judgment in conducting the legislative interests of this Society, without any instructions from the Society during the coming year.

Motion seconded.

Dr. Benjamin then spoke at some length in support of his motion.

Dr. Marcy:—I shall ask Dr. Benjamin to re-state his motion.

Dr. Benjamin:—It is that the Committee on Hygiene and Legislation be uninstructed.

Dr. Henry Mitchell, Asbury Park:—Before taking action on this motion, I would state that this matter has been discussed by

the Board of Trustees. I hope Dr. Kipp will be good enough to communicate the action of the Board.

Dr. Kipp:—The Board of Trustees, at their meeting last evening gave the committee comparatively full power. An advisory board was appointed and, with this board, the committee can take counsel at its discretion.

Dr. McLaughlin:—Do I understand that the Board of Trustees gave the Legislative Committee full power in this matter?

Dr. Marcy:—They are uninstructed so far as it pertains to legislation. There is an advisory committee appointed from the Board of Trustees; if any radical changes are proposed in the medical acts, the Committee on Hygiene and Legislation is to advise with the committee from the Board of Trustees.

The motion was then put and carried.

Dr. A. K. Baldwin, of Newark, spoke in high terms of Dr. Halsey's labors and also praised the persistency and fidelity of the osteopaths in their efforts to get their bill through. He thought that their example should stimulate us to equal them in that respect.

At the suggestion of Dr. Godfrey, Dr. Vander Veer, of Albany, was requested to state what they had done in New York in regard to this matter.

Dr. Vander Veer reviewed the history of medical legislation in New York for many years, and then stated what was done last winter, as follows:

"Our State Medical Society, through its committee on legislation, then formulated the one-board bill, representing the allopaths, homœopaths and eclectics. Our State Society gave the committee on legislation full power to manage that bill as they then thought best, just as you have done to-day. We formulated a bill that would give us one board of State medical examiners, composed of nine members. About fifteen years ago, when the State board was organized, we were obliged to establish three State boards. Ten or twelve years ago our bill was amended, so that we got a most excellent interpretation of the practice of medicine, but when we brought the amendment through, that sentence disappeared. We did not discover its absence until the legislature had adjourned and could not put it back.

"The new definition of the practice of medicine in our bill this year has told the osteopaths very plainly that they could not be made doctors, and could not practice med-

icine. If they were to get anything at all, they found they would have to get it through the one-board bill—an interpretation of their standing in keeping with what we believe to be the right thing. This is the sum and substance of our bill:

"The definition of the practice of medicine with relation to osteopathy shows that those osteopaths in the State must exhibit evidence of having attended in one of their own colleges a two or three years' course of study in anatomy, physiology, chemistry, obstetrics and one or two other subjects. That evidence must come before the board of regents and be acted on, as with any other boards. The osteopaths must educate their students in a four years' course of six to nine months each year, precisely as our students are educated up to the point of therapeutics. This subject is left out entirely. If, after the first of August, 1907, their students can show evidence of having attended a four years' course in these branches (graduating in 1911), they come before the one board and pass in everything but therapeutics. They then get the degree of D. O., doctor of osteopathy, and must put it on their signs. They can not practice medicine or do anything but what they claim they want to do, be doctors of osteopathy.

"The bill received the most bitter opposition from the homeopaths. They did not help us in any way. We said, 'We are going to have this one-board bill.' They said, 'We will defeat it, if we can.' We believe that we have done the wisest thing in settling the matter as we have.

"This gives us one board of medical examiners. As we look back and see our position of three years ago, when we had in our legislature a bill to establish a board for examining and licensing osteopaths, the same for Christian Scientists, one for hydropathists, and one for vitapaths—four bills—we can congratulate ourselves. The other three bills have been held in abeyance, in the hope that the osteopaths would get theirs through. Then these three also would come up. We believe that the one-board bill will defeat the attempt to pass the others, and will give the best results."

Dr. Henry H. Davis expressed his appreciation of the services rendered by the few members who went to Trenton last winter to aid the committee. He also stated "that the osteopaths in this State could accomplish nothing if the medical profession of the State were to take the same interest in legislation that this small band did.

"The homeopaths in this state are different from those in New York, as described by Dr. Vander Veer. They gave us great assistance. At every election, somewhere throughout this State, a medical man takes a hand in politics. Let him take a larger hand and see that within the halls of the Legislature of New Jersey medical men are represented. Thus we can influence medical legislation."

Dr. Davis then spoke in the highest praise of Senator Frelinghuysen and of his invaluable assistance to us in our efforts to pass our medical bill.

Dr. Halsey:—Mr. President, I arise to a question of personal privilege. A year ago we asked for some definite instructions regarding our course of action concerning the osteopathic bill. The only instruction was to fight the bill to the bitter end. The motion as first made by Dr. Benjamin was, if I understood it correctly, that the Committee on Legislation should be left free to act to the best of their judgment. Then he changed it to a motion that they should not be instructed. Now, it has never been a fault of mine that I have been a quibbler, but I think this action is cowardly. If I understand it, this committee of the Board of Trustees is an advisory committee, and when the necessity arises or there is a possibility that any change in the present medical law will be made, they can be called into council. This does not prohibit any member of the Society from expressing his opinion, and it does not prevent the Society from voting us, if they think we should have it, a vote of confidence. We should have the right to use our judgment, for you all know that your interests will be safely guarded, and that the committee does not contemplate a change in the present medical law or any steps that will lower its present high standing. Either give your committee the power to do what they deem best in emergencies, or vote down the report. Unless such action is taken, the resignation of the Chairman of the committee is in your hands.

Dr. Harvey:—I am sure that I voice the opinion of the whole meeting when I say that our intention in voting was to give the committee the power they desire. Our not having done so is due to the fact that the original motion was not presented to us. There is no one here but wishes to get to the original motion. I should like to have some member of the Legislative Committee formulate the motion, so that we may give them the power they ask for.

Dr. Benjamin:—The report was received,

and I made a motion afterwards that they be uninstructed. My motion was that the report be adopted and that the Committee be uninstructed.

Dr. Davis:—The statement made by Dr. Vander Veer shows that the law we had before the Legislative Committee is on the lines of the one adopted by the State of New York; so all the members of the Society may understand just what sort of law we have tried to get through the Legislature this year.

Dr. Marcy:—The next in order on the program is the report of the Committee on Medical Defense.

Dr. William C. Schauffler, Lakewood, presented the report:

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE.

It is a self-evident fact that all members of the medical profession are liable at any time to be threatened with prosecution, as the result of actual or alleged carelessness in the treatment of cases. At other times unscrupulous individuals make threats of prosecution for the purpose of black mail, or to avoid the payment of just bills.

The handling of any such case by the individual physician entails expense of time and worry and many cases go against the physician through his lack of knowledge of legal procedure.

To avoid this, many physicians insure themselves in companies assuming such liabilities, at a moderate annual fee, usually \$10.00. But in several states the responsibility for such medical defense of members in good and regular standing is assumed by the state medical society, with the result that there are fewer prosecutions threatened, and the individual physician is given a greater sense of security in the practice of his profession.

The adoption of such means of medical defense involves the appointment of suitable legal counsel, who is retained by the year, and the provision of means from the treasury of the Society to pay the necessary fees.

Your Committee therefore begs leave to submit its report in the form of the following recommendations:

1.—That the Medical Society of New Jersey assume the defense of any and all members threatened with prosecution for malpractice, provided they be at that time in good and regular standing in their county societies.

2.—That the Council of the Society select annually as counsel some well-known lawyer in the State of New Jersey qualified to act as such, and retain his services at a proper fee.

3.—That the necessary expense so incurred be paid from the Society's treasury.

4.—That the defense be carried out on the following lines:

Every member of the Medical Society of New Jersey who has paid all dues, assessments or other charges assessed or levied by the Medical Society of New Jersey for the year of 1907 shall be entitled to receive, without expense, upon application therefor, the services of an attorney and counselor at law in any action for malpractice

brought against such member in any court within the state of New Jersey, on the following conditions, and not otherwise:

First—Any member desiring to apply for malpractice defense hereby provided, shall immediately upon receipt thereof send to the Secretary of the Medical Society of New Jersey any letter, process of court or other evidence of threatened litigation in connection with such malpractice case.

Second—It shall be the duty of the Secretary to forthwith examine the financial records of the Medical Society of New Jersey, and if such member so applying is found to have paid all arrears, dues or other charges due the Medical Society of New Jersey for the year 1907, he shall certify those facts to the counsel of the Medical Society of New Jersey and forthwith send to such counsel the papers received from the applicant for defense, and said Secretary shall forthwith return to the applicant, if he shall find that such applicant has paid all arrears due the Medical Society of New Jersey, a formal application for defense containing authority for the said Society through its attorney to defend the action and granting to the Society and its attorney sole power to conduct the defense thereof, and agreeing not to compromise or settle said claim for damages for said alleged malpractice without the consent of the Medical Society or its attorney. The said applicant shall furnish and return to the Secretary with his application duly executed, a full, accurate and complete history of his treatment of the case of which the alleged malpractice arose, giving dates, names of witnesses, nurses and other attendants, all of which information shall, upon its receipt by him, be forwarded by the Secretary of the Medical Society of New Jersey to the counsel of the Society.

Third—If, on the other hand, the Secretary finds that any member so applying has not paid all arrears as herein specified, then, and in that case, he shall return at once to the applicant all papers or memoranda received by him from said applicant, together with a statement that he is not entitled to defense, and the reason therefor.

Fourth—It is further understood between each and every member of the Medical Society of New Jersey and the Medical Society of New Jersey, that under no conditions or contingency will the Medical Society of New Jersey pay any sums awarded in settlement, compromise, or by verdict or otherwise against any member sued for alleged malpractice, and each member in applying for the services of the attorney of the Society in any malpractice case, shall agree not to obligate in any manner the Medical Society of New Jersey or any persons connected therewith, to the payment of any sums whatsoever for any purpose.

Fifth—If the counsel of the Medical Society of New Jersey, as hereinbefore provided for, finds on investigation that the party applying to such Society for defense, is guilty of an alleged malpractice, and that a judgment will probably lie against such applicant, then such applicant shall not have the aid of the Medical Society of New Jersey in his defense.

APPLICATION FOR MALPRACTICE DEFENSE.

To the Medical Society of New Jersey,
South Orange, N. J.

The undersigned, residing at _____ in
the County of _____, New Jersey, and being
a member of the Medical Society of New Jer-

sey and of the Medical Society of the County of _____, hereby applies for defense in an alleged action for malpractice brought against him by _____ of _____, New Jersey.

For and in consideration of this defense the undersigned agrees not to compromise or adjust this claim without the consent of the Medical Society of New Jersey or its attorney. He renounces his own and places in the Medical Society of New Jersey full power to defend said action and look after his interests.

The undersigned agrees not to obligate the said Society to the payment of any money whatsoever for any purpose, and will help, aid and assist and coöperate with the Medical Society of New Jersey and its attorney in the defense of said action, in the securing of witnesses, in the execution of any papers properly presented to the undersigned for signature and execution, and do all things necessary and proper in the defense of the above action.

That the names of all witnesses, physicians and nurses who have any knowledge of the circumstances in this action are as follows:

..... Residing
..... Residing
..... Residing
..... Residing
..... Residing

That the undersigned has hereto annexed a true, accurate and complete statement of the treatment by him of the patient, and a complete history as far as the undersigned is able to give it, of any other treatment received by the patient, giving the dates and places of all examinations, treatments or operations by himself or others.

The undersigned encloses herewith all papers, receipts, bills or other documents received by the undersigned in connection with this action.

Dated, _____ day of _____, 190 _____, at the
County of

Applicant.

We have carefully investigated measures taken by other state medical societies to protect their members in alleged malpractice suits, and we have found nothing better than the course pursued by the Medical Society of the State of New York, which we have incorporated into this report.

All of which is respectfully submitted,

T. N. GRAY,

W. P. MELCHER,

W. G. SCHAUFFLER, Chairman.

Dr. Wilson:—I move that the thanks of the Society be extended to this committee for its very able report, and that the report be received, and its recommendations not adopted. I make this motion because I now pay ten dollars a year to a commercial institution to protect me against suits for malpractice. I formerly paid a large sum to another institution, which was run by a set of doctors, and my opinion of doctors as business men is a small one. A good doctor makes a poor business man.

Motion seconded.

Dr. Benjamin:—It seems to me that the county society is the most competent party to judge of the worthiness, standing, etc., of

its members, and that, before the State Medical Society assumes to protect any doctor in any part of the State, the request to do so should come through a vote of the county or district society. I would offer as an amendment to the recommendation contained in the report the following: "Provided the application be made by a majority vote of his county society."

Dr. E. W. Hedges, Plainfield:—There are three reasons why the bill does not appeal to me: First, on account of the delay that would be encountered, which might be fatal to the case (there is so much red tape); second, because, if it were adopted, our treasury would soon be depleted of funds, supposing that lawyers would charge this society as much as they charge laymen, and, third, because if it were shown that a physician was being defended by a lawyer employed by his brother physicians, it would prejudice him in the eyes of the jury. They would say: "These doctors are banded together to cheat the poor when they make mistakes." The public would believe this, and the doctor that stood on that platform would be defeated. A much better plan, if a physician wants to be protected, is for him to insure in an outside company. There is one consideration that I should like to call your attention to, and that is whether the expenditure of money in this way is not forbidden by the by-laws of the Society. If I recall correctly, they forbid the expenditure of money except for the work of the Society.

Dr. Chandler:—I think that the committee are certainly entitled to thanks for the time and thought they have given the subject. I cannot say that I am favorable to the adoption of the report, as I have not had time to consider it. I question whether it should not lie over until next year's meeting. All the remarks so far have been made in opposition to the report of the committee, but there are in it certain very favorable features. A great many persons ask, "What is the good of the State Society or the county society?" "What can they do for us?" This is one good that they could do for them. In the New York State Society they have a system of medical defense, and it has done a great deal for the upbuilding of the State and county societies there. I am not prepared to pass an opinion upon the report of the committee, and I would propose, as a substitute for Dr. Wilson's motion, that the report be received and referred to the Board of Trustees for their consideration and report. As to Dr. Hedges' statement that the

funds of the Society cannot be appropriated for this purpose, I would say that they can be so used if recommended by the House of Delegates and approved by the Board of Trustees.

Dr. Wilson:—I will not accept that amendment. I want to have it individual. I want the privilege of saying yes or no. I do not want the question referred to the Board of Trustees or any one else.

Dr. Godfrey:—I see no reason why we should not make use of our distinguished friend from New York, Dr. Vander Veer, in reaching a decision concerning this matter. This law has been in operation for some years in New York, and I ask that the privilege of the floor be given him to tell us what the Medical Society of New York offers for membership.

Dr. Vander Veer:—If you will bear with me just one moment, I will explain how it is in my State. The county society is the unit of the organization of the Medical Society of New York. The man elected a member of the county society is received as a member of the State society. The men who live in a certain county know the members of the county society and know whether they are qualified. They are elected to the county society, and the dues are one dollar a year. If we want to entertain any one or indulge in any other extra expense, we must pass around the hat. We do not take out from the funds of the society any money for a banquet or anything of that sort.

The man who becomes a member of our State society from the county society pays an additional fee of three dollars, and has then to pay four dollars a year. What does he get from the State society? He gets protection in all malpractice suits; he gets the *New York Medical Journal*, and he gets a directory that comprises the names of all the physicians in New York, New Jersey and Connecticut. He gets for four dollars these three important considerations. It stimulates a man to become a member of the State society by giving this amount of protection.

The system has worked admirably. We pay no more than twenty-five hundred dollars to our lawyer, who is an able man. He sees that all the evidence is brought in, and from this evidence he decides whether he should go into court and join issue with the other party. All that the doctor has to do is to present the facts from his own standpoint.

Dr. Ambrose Treganowen, South Amboy,

thought that the "code of ethics" was sufficient protection for the physician.

Dr. George T. Welch, Passaic:—I want to second the amendment offered by Dr. Chandler. My reason for doing so is that this question is too important to be settled when men are in a biased and almost censorious mood. What grievances the gentleman on my right may have had against medical men in cases of that kind I do not know, but we ought to take the matter slowly and carefully. By putting it back into the hands of the Trustees for another year, for further digestion, we may ultimately do a great deal of good to the medical men of the State.

Dr. Wilson:—I will accept an amendment that the matter be laid on the table for a year.

Dr. English:—I agree with this. Lay it on the table for a year; publish it in the JOURNAL and send communications to the journals if you choose. Then, next year, take it up for action, when we have thoroughly considered the matter.

The motion, as amended "to lie on the table for one year," was seconded and carried.

Dr. Chandler:—I should like to present the report of the Board of Trustees on the amendments to the by-laws, which were referred to them. First, that suggested by Judge Garrison. They approve of its adoption. This amendment was then read:

For amendment see page 113.

Moved and seconded that this amendment to the by-laws be adopted. Carried.

Dr. Chandler:—I present another amendment, which has been twice read and tabled for one day, and which is to be added to Chapter XII of the By-Laws, as Section 3:

For amendment see page 113.

Dr. Wilson:—I should like to know what comes after that.

Dr. Chandler:—There are two other amendments. This is to be put at the end of Section I., of the same chapter:

For amendment see page 113.

Moved and seconded that both these amendments be adopted. Carried.

Dr. Chandler:—In Chapter IV, Section 2, first line, strike out "annual delegates" and insert "members."

Moved and seconded that this amendment be adopted. Carried.

Dr. English:—The amendment offered by Dr. Mercer has been approved by the Board of Trustees. In lines six and seven of Section 1, Chapter XII, strike out the words "one month before the annual meeting," and

insert instead thereof "two weeks before the beginning of the fiscal year." This change is necessary to bring this in line with the amendments you have adopted. It will read: "at least two weeks before the beginning of the fiscal year of the Medical Society of New Jersey," etc.

Moved and seconded that this amendment be adopted. Carried.

Dr. Senseman:—I move that Dr. Strock be allowed to read his paper, which was read by title this morning.

Dr. Wilson:—I hardly think that it would be courteous to allow this paper to be read until after the Vice-President's address.

Dr. Senseman:—Is it necessary to have the sanction of the House of Delegates to a change of program?

Dr. Marcy:—The House of Delegates has that power.

Dr. Wilson:—I will substitute for the motion that Dr. Strock be allowed to read his paper after the Vice-President's address.

Dr. Marcy:—The President decides that Dr. Strock may read his paper after the program of the afternoon is finished.

Dr. Mitchell:—Would a resolution be in order? If so, I have one to offer.

WHEREAS, Confusion has in numerous cases occurred in the records of this Society because of the custom heretofore prevailing in relation to the forwarding of the names of members of the component societies and the separate transmission of the annual dues to the Medical Society of New Jersey,

Resolved, That the component societies are hereby requested to cause all the annual dues to be transmitted to the Treasurer of the Medical Society of New Jersey *through the hands of the Secretary of said Society*, and that said dues be forwarded at the time when the list of members of the local Society is reported, as required in the By-Laws of the Medical Society of New Jersey.

Resolution seconded.

Dr. Mitchell: It may be necessary to explain the purpose of this resolution. It has been found by the secretary of the State Society that at times the list of members reported by the secretaries of local societies does not correspond with the list of dues received by the treasurer of the State Society from the treasurers of local societies, thus indicating that in some instances the dues of members of the local society have not all been paid. This confusion would not arise if all dues which have been paid were transmitted to the *secretary* of the State Society at the time when the list of names of members of local societies is forwarded. There ap-

appears to be nothing in the by-laws to prevent this change.

Resolution adopted.

A motion to adjourn was made, seconded and carried.

The House of Delegates adjourned at 4.45 P. M.

Dr. Marcy:—We should be both unappreciative and ungrateful if we did not recognize that the profession of Long Branch and its Board of Trade have been more than courteous to this Society. They have provided us with entertainments and shown us courtesies that are rather unusual. Therefore, I think that a vote of thanks should be extended to the local members of the Committee of Arrangements, particularly Dr. John W. Bennett, and to the Board of Trade of Long Branch for the hospitable manner in which they have entertained us.

Dr. English:—I would make such a motion; and, in doing so, I should like to make a remark concerning the difficulties that the local committee have had to contend with. Every allowance should be made for any shortcomings, because a change was made in the place of meeting quite late. Arrangements had to be made very quickly; there was little time to make them in. Under the circumstances, I think that the local committee and the authorities have done wonderfully well in the excellent provision that they have made for our convenience and pleasure.

The motion to extend a vote of thanks to the local committee and the authorities was seconded and carried unanimously.

A motion to adjourn was made, seconded and carried.

The House of Delegates adjourned at 4.45 P. M.

Thursday, June 27, 1907, 11.30 A. M.

Dr. Chandler:—The following permanent delegates, who have been absent from two consecutive meetings, are excused: William B. Graves and Thomas S. P. Fitch, of East Orange; William S. Jones, Camden; C. F. Adams, Trenton; Samuel Johnson, Asbury Park, and F. W. Flagge, Rockaway.

The number of persons present at this session is as follows: Fellows, 16; officers, 7; permanent delegates, 86; annual delegates, 39; associate delegates, 71; guests, 125. Total, 344.

I wish, just for a moment, to state the effect of some of the amendments passed yes-

terday, and of the resolution adopted. These amendments make the fiscal year begin with the 1st of June; and the reports that have been sent in one month before the annual meeting will be sent in one or two weeks earlier than that—two weeks before the 1st of June. It is important for the secretaries and treasurers of the component societies to keep this in mind.

A second point is that a newly elected or reinstated member is not in "good standing" in either state or county society until his dues to the state society have been paid to the state treasurer. Another point relates to the *method* of paying those dues. They are to be sent to Dr. Mercer *through the hands of the Secretary* (Dr. Chandler). In this way the Secretary can at once enter their names on his lists, certify them to the American Medical Association and then forward the check to Dr. Mercer.

Dr. Wilson:—Do I understand that the check will be sent to the Secretary, and that he will forward it to the Treasurer?

Dr. Chandler:—Yes. The check will be made out to the order of Dr. Mercer, will be sent to the Secretary, and he will pass it on to the Treasurer. The date of post mark will indicate when it was forwarded by the County Treasurer.

Dr. Enoch Hollingshead, Pemberton:—I move that the Secretary notify the county treasurers, so that they may be aware of this change.

Seconded and carried.

Dr. Marcy:—This very beautiful and useful gavel was presented to the Medical Society of the State of New Jersey by one of the instrument exhibitors.* I think that a vote of thanks should be tendered to this firm for this very pretty and exceedingly useful gift. It is not solid silver, but it answers every purpose.

Seconded and carried.

Dr. Marcy:—There was a matter referred by the Board of Trustees to the House of Delegates—a resolution that the Medical Society of New Jersey recommend to the Governor the names of gentlemen to be appointed to various institutions and boards. The Board of Trustees refers it back. No action has been taken.

Dr. Mitchell:—I move that it lie over for a year; because the meeting is now small, and this will allow of more discussion.

Seconded and carried.

Dr. Marcy:—I should like to thank you

* The Valzahn Co., 132 South 11th St., Philadelphia.

for the very courteous treatment that I have received. It has been a great pleasure to preside over the deliberations of this Society. I thank you, one and all. The house stands adjourned.

Adjourned at 11.35 A. M.

The following persons, whose names are recorded in the registration book, were present:

FELLOWS.—Charles J. Kipp, Newark; D. C. English, New Brunswick; John C. Johnson, Blairstown; John W. Ward, Trenton; H. Genet Taylor, Camden; George T. Welch, Passaic; John G. Ryerson, Boonton; O. H. Sproul, Flemington; William Elmer, Trenton; T. J. Smith, Bridgeton; C. R. P. Fisher, Bound Brook; Luther M. Halsey, Williamstown; J. D. McGill, Jersey City; E. L. B. Godfrey, Camden; Henry Mitchell, Asbury Park; W. B. Johnson, Paterson. Total, 16.

OFFICERS.—Alexander Marcy, Jr., President, Riverton; Edward J. Ill, First Vice-President, Newark; David St. John, Second Vice-President, Hackensack; Benjamin A. Waddington, Third Vice-President, Salem; Daniel Strock, Corresponding Secretary, Camden; William J. Chandler, Recording Secretary, South Orange; Archibald Mercer, Treasurer, Newark. Total, 7.

PERMANENT DELEGATES.

Atlantic County.—William B. Stewart, Edward A. Reiley, J. Addison Joy, Edward C. Chew and Emery Marvel, Atlantic City.

Bergen County.—Henry C. Neer, Park Ridge, and Samuel E. Armstrong, Rutherford.

Burlington County.—Enoch Hollingshead, Pemberton, and Walter E. Hall, Burlington.

Camden County.—Duncan W. Blake, Gloucester; Daniel Strock, William H. Iszard, William A. Davis, Harry H. Sherck, Alexander McAlister and William S. Jones, Camden.

Cumberland County.—Joseph Tomlinson and Ellsmore Stites, Bridgeton.

Essex County.—Charles Young, Joseph Young, George R. Kent, Aaron K. Baldwin, L. S. Hinckley, Henry L. Coit, Theodore W. Corwin, Richard G. P. Dieffenbach, Joshua W. Read, George A. VanWagenen, James T. Wrightson, Theron Y. Sutphen, Charles F. Underwood, L. Eugene Hollister, Charles D. Bennett and Robert G. Stanwood, Newark; William J. Chandler, South Orange; David E. English, Millburn; George B. Philhower, Nutley; William B. Graves, East Orange, and Thomas W. Harvey, Orange.

Gloucester County.—George E. Reading, Woodbury; James Hunter, Jr., Westville, and Eugene T. Oliphant, Bridgeport.

Hudson County.—Gordon K. Dickinson, Joseph M. Rector, George E. McLaughlin, Mortimer Lampson, John C. Parsons and T. R. Chambers, Jersey City; Fred M. Corwin, Bayonne; J. A. Exton, Arlington, and Samuel A. Helfer, Hoboken.

Hunterdon County.—W. S. Creveling, Valley.

Mercer County.—R. R. Rogers, David Warman, Elmer Barwis, Thomas H. MacKenzie, C. F. Adams, J. C. Felty and H. B. Costil, Trenton.

Middlesex County.—Ambrose Treganowan, South Amboy, and F. M. Donohue, New Brunswick.

Monmouth County.—Henry Mitchell and Samuel Johnson, Asbury Park; D. McLean Forman,

Freehold; Edwin Field, Red Bank; F. C. Price, Imlaystown, and Cyrus Knecht, Matawan.

Morris County.—Stephen Pierson, A. A. Lewis and B. D. Evans, Morristown; Levi Farrow, Hackettstown; F. E. Flagge, Rockaway, and Calvin Anderson, Madison.

Passaic County.—P. A. Harris, George H. Balleray, John L. Leal, C. H. Scribner and Andrew F. McBride, Paterson.

Somerset County.—S. O. B. Taylor, Millstone; J. P. Hecht and A. L. Stillwell, Somerville.

Sussex County.—Benjamin W. Ferguson, Beemerville.

Union County.—Alonzo Pettit, James S. Green, N. L. Wilson and T. N. McLean, Elizabeth, and Elihu B. Silvers, Rahway. Total, 87.

ANNUAL DELEGATES AND REPORTERS.

Atlantic County.—Theodore Senseman and E. S. Sharpe.

Bergen County.—Valentine Ruch, Jr.

Burlington County.—W. P. Melcher and William H. Shipp.

Camden County.—E. B. Sharp, Dowling Benjamin and Paul M. Mecray.

Cumberland County.—Amos J. Mander and H. G. Miller.

Essex County.—H. B. Epstein, H. F. Cook, Frank W. Pinneo, J. Henry Clark, Wells P. Eagleton, J. H. Bradshaw, Linn Emerson and P. B. Davenport.

Gloucester County.—Harry A. Stout.

Hudson County.—W. F. Faison, O. R. Blanchard and Harry B. Rue.

Mercer County.—William S. Lalor, Ira M. Shepherd and H. G. Norton.

Middlesex County.—Alfred L. Ellis.

Monmouth County.—W. P. Campbell and D. D. Hendrickson.

Morris County.—Henry A. Cossitt and John Walters.

Ocean County.—William G. Schauffer.

Passaic County.—Byron C. Magennis, Edward F. Denner, J. V. Bergin and Henry Kip.

Salem County.—W. L. Ewen.

Union County.—Thomas P. Prout, Thomas E. Dolan and J. B. Harrison.

Total, 39.

ASSOCIATE DELEGATES.

C. C. Beling, J. J. Broderick, H. H. Davis, John N. Bennett, William A. Westcott, J. C. McCoy, J. T. Welch, F. J. Keller, Josiah Meigh, George T. Tracy, J. L. Taylor, Harry E. Shaw, Harry B. Slocum, C. Garrabrant, Edward Guion, Rush Neer, J. G. L. Borgmeyer, Hamilton Vreeland, G. B. Gale, P. B. Rafferty, J. J. Baumann, J. S. Baer, Ellis W. Hedges, L. L. Mial, George H. Baker, A. E. Carpenter, Samuel F. Stanger, James J. Reed, V. M. Disbrow, E. J. Marsh, Jr., W. B. Jennings, W. W. Beveridge, J. H. Moore, E. M. Richardson, George F. Wilbur, F. W. Martindale, R. C. Barrington, E. S. Corson, D. H. Oliver, Joseph Stokes, Edgar B. Grier, Stephen T. Quinn, Fred S. Buckingham, Armin Fischer, T. N. Gray, J. D. Lippincott, E. E. Worl, Ed. M. Richman, F. A. Faison, A. Nelson, A. A. Strasser, H. J. Burnett, C. Loper, H. E. Lore, W. P. Glendon, Harold D. Corbusier, Ed. M. Beach, H. J. Wallhauser and Isaac S. Long. Total, 59.

Other associate delegates were present but it is impossible to decipher their signatures in the registration book.

GUESTS.

John B. Donges, John H. Musser, H. S. Houghton, William Martin, Albert Vander Veer, James Vander Veer, Morris Manges, Charles P. Noble,

William M. Leszynsky, Charles G. Garrison, H. M. Gesner, John B. Deaver, Howard A. Kelly.

The following Permanent Delegates were absent: William E. Darnall, R. H. Parsons, S. T. Day, H. C. Bleyle, Charles H. Bailey, Thomas S. P. Fitch, R. C. Newton, Edward Staehlin, R. P. Francis, F. D. Gray, I. S. Cramer, George N. Best, George H. Franklin, David Stephens, R. M. Curtis, W. H. James, Henry Chavanne, Mary E. Gaston, C. L. Lindley, B. W. Ferguson, ~~T. H. Tomlinson~~ and G. W. Cummins.

The following Permanent Delegates have been absent from two consecutive annual meetings: Isaac S. Cramer, Flemington; George N. Best, Rosemont; George H. Franklin, Hightstown; David Stephens, New Brunswick; Charles L. Lindley, Lakewood, and T. H. Tomlinson, Plainfield.

WM. J. CHANDLER, *Secretary*.

**Abstract of Minutes of the Scientific Sessions
of the 141st Annual Meeting of the Medical
Society of New Jersey, held in Long
Branch on June 25, 26 and 27, 1907.**

Tuesday, June 25, at 4.15 P. M.

Rev. George L. Dobbins, of Long Branch, delivered the invocation, and Mayor McFadden made the Address of Welcome.

The President announced that the members of the Nominating Committee would meet at five o'clock in the parlor of the hotel.

The first paper was by Dr. E. L. B. Godfrey, of Camden, on "The Legality of State Medical Examinations and Reciprocity in Inter-State Medical Licensure."

Dr. Godfrey said that the right of a state to demand that graduates of medical colleges shall pass a state board before being allowed to practice is based upon the police power of the state. It is one of the rights not vested by the Constitution in the Federal Government nor denied to the states. It could not be exercised by the Federal Government without an amendment to the Constitution. He also made a strong plea for reciprocity between states having nearly similar standards of qualifications.

In the discussion, Dr. William Perry Watson, of Jersey City, said that the existing medical law of New Jersey is second to none in any state, with one exception. Dr. Watson then gave the Society his idea of a perfect law of the kind.

Dr. Mortimer Lampson, of Jersey City, objected to a statement contained in Dr. Godfrey's paper, that there are three great medical schools; and he denied that medical examining boards had had any influence in

advancing the merits or standing of the profession.

Considerable discussion upon this point followed, which was participated in by Drs. Henry H. Davis, Dowling Benjamin and A. K. Baldwin. Dr. E. E. Worl said that it was very difficult to have persons violating this law punished. Dr. J. C. Felty, of Trenton, asked whether there were many colleges whose students the board refuses to examine. Dr. John W. Bennett, of Long Branch, said that this was true of about thirty per cent. of the medical colleges of the United States. He also remarked that no practitioner could state that the attention of the Board of Examiners had ever been called to anyone practising illegally, but that they had called the attention of the District Attorney to the matter. The law does not permit the Board to prosecute. He likewise claimed that the Examining Board does advance the profession by raising the standard and compelling the colleges to raise theirs in accordance with it. A discussion on the subject of illegal practice followed, participated in by Drs. W. A. Clark, of Trenton; Bennett, Eagleton and Worl. Dr. George H. Balleray, of Paterson thought it would be a good thing to have a National Examining Board.

Dr. Hawkes, of Newark, then read his paper on the Lymphatics, a brief synopsis of which appears on the program. The discussion on this was opened by Dr. Charles Young, of Newark, who considered the part played in the nutrition of the tissues by the lymphatics, and said that it seemed as if the lymphatic system had been especially designed as a protective agency of the body, carrying off waste and preventing the absorption of infective material. Dr. Norton L. Wilson emphasized the point that enlargement of the lymph-glands means bacterial infection. Dr. C. C. Beling, of Morris Plains, spoke further on this point, and said he had seen a case in which the inguinal glands enlarged sufficiently to produce thrombosis of the saphenous vein, but did not go to the point of suppuration. Dr. Gordon Dickinson spoke of the importance of the omentum to the surgeon, and the action of the lymphatics in cases of infection of the peritoneal cavity. Dr. Emery Marvel said that it was new to him to think of the lymph-channels as being efferent, and he had always viewed them as being afferent. He mentioned that recent investigations have shown that bacteria placed within the peritoneal cavity will reach the liver in fifteen minutes.

Tuesday, June 25, at 8:35 P. M.

I. ORATION IN SURGERY.—*Some Observations on Four Decades of American Surgery.*

Dr. Albert VanderVeer, of Albany, delivered the Oration in Surgery, reviewing the progress made in very many surgical procedures during the last forty years.

It was moved and seconded that the thanks of the Society be extended to Dr. VanderVeer for his most instructive and interesting paper. Motion carried.

It was moved and seconded that Drs. Deaver and Musser, with Drs. Manges and VanderVeer, be invited to sit with the Society and take part in the discussions. Motion carried.

2. ORATION IN MEDICINE.—*The Physician and the Medical Press.*

The Oration in Medicine was delivered by Dr. Morris Manges, of New York. His principal contention was that what is regarded as unfit for the body of a medical journal should be considered unfit for its advertising pages. He thought that articles regarding the newer drugs should be published for the information of physicians, but that manufacturers should be forbidden to reprint these for commercial purposes.

It was moved and seconded that the Association extend a vote of thanks to Dr. Manges for his very delightful paper. Carried.

Dr. J. S. Baer, of Camden, then read a paper on "When to Operate and When Not to Operate in Ruptured Ectopic Pregnancy." He said that, although it would be best to operate before rupture has taken place, this is not always possible; therefore, the question is when to operate after the rupture has been diagnosed. In answer, he said that in most cases one should operate as soon as the diagnosis is made; but that in some few cases, when there is profound shock, a little waiting will sometimes result in saving life. He reported six cases illustrating these points.

Dr. B. F. Baer, of Philadelphia, opened the discussion. He always operates whenever there is a tumor found in the pelvis, whether it is extrauterine pregnancy or not. It is often very hard to make a diagnosis in extrauterine pregnancy. In regard to what shall be done when the rupture has occurred and the patient is practically dead, Dr. Baer said that he has not the courage to operate in such circumstances. He believes that the patient will be saved more frequently if the

gynecologist waits awhile. He does not endorse the operation by vaginal section in extrauterine pregnancy.

Edward J. Ill, of Newark, the First Vice-President of the Society, thought that such cases should not be taken to a hospital, but should be attended to on the spot, no matter where it be. He also thought that no operation should be performed in cases of tubal abortion.

Dr. P. A. Harris, of Paterson, said that there are two things by which the general practitioner can diagnosticate ectopic gestation: a typical menstruation and pains. He should not accept a statement that it is probably a case of abortion without inquiring whether the fetus has been seen by any one.

Dr. G. K. Dickinson, of Jersey City, did not think that operation had ever hastened a death in extrauterine pregnancy. He believed in always operating, without waiting to transfer the patient to the hospital, and thought that the method of anesthesia afforded hope in patients that have lost a great deal of blood.

Dr. Emery Marvel, of Atlantic City, said that in conditions of shock, stimulation will benefit the vasomotor system, and can be given during the operation. Therefore, delay on that ground is unjustifiable.

Dr. J. M. Rector, of Jersey City, in tragic cases the blood-pressure will show the exact condition of the patient and how great from shock she is suffering.

Dr. J. W. Martindale, of Camden, said that he had recently had two cases in the tragic state of ectopic gestation. One was operated on and died, and the other was operated on and recovered. One cannot tell which case will recover and which will not, so one should operate in all cases. Collapse is a fainting condition, and fainting is nature's method to stop bleeding. If stimulation is applied, the bleeding will recommence; it would therefore be productive of more harm than good.

Dr. J. S. Baer, closing the discussion, said he did not believe in stimulation, except in a radical operation. He saved one patient, he believes, by intravenous infusion of salt-solution. He does not know in which cases waiting will save the patient, but feels that such cases exist. All his patients were out of bed sooner than if he had operated from below. He believes that the hematocele is absorbed in but a limited proportion of cases.

DIET IN PULMONARY TUBERCULOSIS.—By.
Dr. Theodore Senseman, Atlantic City.

The subject was considered under the following headings:

1. Not the amount of food ingested, but the amount assimilated, is the important consideration.

2. Improve digestion, and allow appetite to follow of its own accord.

3. There is a pivotal point in each patient's digestive ability, which must be ascertained.

4. This pivotal point is capable of being raised.

5. All tubercular individuals show evidences of digestive derangement. It is folly to attempt to make them do more work in this condition than they could in a healthy state. Stuffing a patient with solid food is, therefore, a mistake.

6. The diet that gives the greatest amount of nourishment and makes the least demand upon the digestive organs is the diet of choice. Raw eggs and milk meet these requirements.

7. Each patient has a normal weight, beyond which we should not endeavor to force him.

8. This normal weight attained, the smallest quantity of food that will enable him to maintain it is sufficient.

9. So long as this normal weight can be maintained, the patient has nothing to fear from tuberculosis.

Dr. D. E. English, of Milburn, felt sorry that Dr. Senseman had not laid more emphasis upon purgation. He favors three or four bowel-movements a day, to get rid of the waste products of the extra amount of food ingested. He adds a little water and salt to each glass of milk.

Dr. Fred M. Corwin, of Bayonne, said that the nutrition of the patient should be carefully watched from day to day, and that feeding should not be done in a routine manner.

Adjournment at 10:50 P. M.

Wednesday, June 26, at 10:50 A. M.

PREMATURE SEPARATION OF THE PLACENTA.

—By *J. W. Martindale, M. D., Camden.*

The writer first described a fatal case of the kind that occurred in his practice during the last year.

He then quoted descriptions of cases seen by Dr. Coe of New York, and Dr. Wm. Nicholson, of Philadelphia, and refers to Dr. Goodell's paper published in the *Ameri-*

can Journal of Obstetrics in 1870. The condition has been ascribed to the hemorrhagic diathesis, nephritis, hydramnios, death of the fetus, short funis, and fatty and calcareous degeneration of the placenta. Its symptoms are a steady pain in the lower part of the abdomen, weak fetal heart sounds, irregularity of the uterine contractions, and a show of blood. Sometimes external hemorrhage is not noted. The hemorrhage is usually concealed until it reaches serious proportions. The differential diagnosis from colic is made by the absence of shock in the latter, the history of having eaten indigestible food, and the presence of constipation; from ruptured tubal abscess by the absence of a previous history of tubal disease and of localized tenderness over the tubes, and from rupture of the uterus by the fact that the condition comes on more gradually in detached placenta than in rupture of the uterus, and that the uterine tumor gets larger after the accident in detached placenta, while it gets smaller in rupture of the uterus.

The prognosis is very bad. The children almost always perish, and only vigorous women that receive prompt attention are likely to survive.

Dr. Martindale then discussed the treatment, the question being whether one shall wait or empty the uterus at once. After quoting the opinions of various writers, he declares that the latter gives the lowest mortality. The condition requires for its management a stout heart and prompt action on the part of the attendant.

Dr. H. H. Sherck, of Camden, who had been called by Dr. Martindale to see the case mentioned in his paper, gave some additional details of it, and then quoted some cases reported by Dr. Franks, of Louisville, Kentucky.

Dr. Charles P. Noble, of Philadelphia, said that every one that attends labor cases should post himself regarding premature separation of the placenta; because, though such cases are rare, the only salvation of the patient when they occur is that the physician shall act promptly and courageously. The consensus of opinion is that if, at the time the diagnosis of concealed hemorrhage is made, the cervix is sufficiently dilated for the application of the forceps, that treatment should be instituted. If not, a Cæsarean section should be done at once, provided there is available any one that can do it properly, but it should never be done by one that does not know anything about it.

SYMPOSIUM ON DISEASES OF THE GALL BLADDER.

Etiology and Pathology. H. G. Norton, Trenton.

Cholecystitis, which is nearly as frequent as appendicitis, is more difficult to diagnose and less amenable to treatment than other surgical diseases. It is thought to be most commonly caused by (1) microbic infection, (2) toxins, and (3) direct traumatism to the gall bladder. The microbic infections include septicæmia, pyemia, influenza, pneumonia and typhoid fever; the toxins arise from diseases of the alimentary canal, including typhoid fever and dysentery. Appendicitis is sometimes a focus for the spread of the infection to the liver and gall bladder. It may be direct extension from the duodenum, through the common and cystic ducts; or by way of the blood vessels, or both.

In general blood infection the micro-organisms may be excreted into the bile ducts or gall bladder from the hepatic artery and portal vein. That cholecystitis does arise from typhoid infection is proved by the finding of typhoid and colon bacilli in the gall bladder. It sometimes occurs years after the typhoid infection. The author has never seen a well-marked case of typhoid cholecystitis, but it does occur as a complication. The irritation of previous cholelithiasis may be the factor needed to produce cholecystitis as a complication of typhoid, acting either by obstructing the duct and causing distension; or by ulceration of the mucous membrane from pressure, thus affording an avenue of infection. More than one variety of germ may be found at the same time in the gall bladder. Suppurative cholecystitis is due to a further development of the causes of acute cholecystitis. The presence of gall stones in the gall bladder is probably a frequent causative factor of cancer, but gall stones are frequently present for years in cases in which no cancer develops. Primary cancer occurs without the presence of gall stones in twenty per cent. of the cases. Irritation from the gall stones in the gall bladder of a person predisposed to cancer probably produces cancer of the liver. Analogous to irritation by the gall bladder as a factor in causing cancer is the greater frequency of uterine and mammary cancer in multipara.

Diagnosis. P. A. Harris, Paterson.

To make the diagnosis one should uncover the body of the patient and have the exact seat of the pain pointed out. Palpation, inspection and percussion should then

be practiced. The great progress in the understanding of visceral disease dates from the investigation of these cavities by the knife of the surgeon—autopsies *in vivo*, as they have been called, being particularly useful in the study of gall stone disease. In cholecystitis, it is the inflammation caused by the stones, rather than the stones themselves, that causes the symptoms. The commonest diagnostic symptom is colic. The pain does not always center over the gall bladder, although it usually does. The differential diagnosis is to be made from (1) lesions of the gall bladder, (2) ulcer and cancer of the stomach and duodenum, (3) appendicitis, (4) kidney stone or tuberculosis, and (5) pancreatitis. Under the heading of gastralgia may often be found a good description of gall stone colic. Jaundice does not appear when the seat of inflammation is limited to the gall bladder. Its presence is presumptive evidence of gall stone disease, but its absence would not disprove this diagnosis. The test of finding or not finding gall stones in the stools after the attack has only a restricted value.

Complications. G. K. Dickinson, Jersey City.

Until recent times, various conditions discovered in conjunction with diseased states were considered to be partially independent of the same, and were called complications; but recent betterment of knowledge has demonstrated that these are but an extension of the primary disease to other structures. Conditions leading to an extension of disease processes of the region under discussion are:

1. Receptive nerve states. The gall bladder region being supplied by filaments from the cerebral, spinal and sympathetic nervous systems, it is not to be wondered at that a person in great pain should have some disturbance in parts innervated by one or other of these.

2. Obstruction of the flow of bile, depriving the intestines of their accustomed fluid, on the one hand, and on the other, inducing dynamic and physiologic conditions by the failure of the bile to be discharged.

3. Conditions of tension. Bile is secreted under low tension, as compared with some other fluids. Consequently, alterations in the structure of the bile tract and liver induced through this condition will be slow of progress, and, according to whether the obstruction be steadily maintained or intermittent, there will be two distinct pathologic results.

4. Bacterial invasion, either ascending

from the duodenum or transmitted through the blood. Bile, not being bactericidal, will harbor germs for an indefinite time.

5. Inflammatory states in surrounding structures and their concomitants. Protective adhesions form with the omentum. This, if the inflammation be not too intense, may bring about resolution through phagocytic action. Adhesions between the neighboring organs may produce serious pathologic conditions.

6. Ulceration through calculi. The pressure of calculi may cause pressure necrosis or ulceration, and if adhesions form, calculi may pass through them to adjoining viscera.

7. Hyperplasia, or regular or irregular development. Hyperplasia of the mucosa produced by calculi impacted in the cystic duct may take on adenomatous changes, and eventually become a true adenocarcinoma.

Medical Treatment. J. H. Musser, Phila.

Dr. Musser said that the subject should not be the medical treatment of gall stones; but, rather, the medical treatment of that state of the liver and the ducts, including the gall bladder, on account of which there is a tendency to the formation of stones. There are many instances in which operation cannot be resorted to. Cholelithiasis is caused, on the one hand, by toxic influences; and, on the other, by alterations in the digestion producing modifications in the reflexes of the duodenal end of the stomach, and thus causing either a limitation or an increase of hepatic secretion. It may also arise from circulatory conditions of the liver secondary to heart trouble and from infection. Remembering these four predisposing conditions, one realizes that there is a large field for medicinal or hygienic therapy.

In a general way, then, it may be said that cholelithiasis demands hygienic treatment; removal or modification of the cause, so far as it can be brought about; and, further than this, the use of specific measures. In a number of cases, Dr. Musser has succeeded in probably lessening the number and severity of the attacks by having the patient wear a properly constructed bandage. In regard to the use of olive oil, Dr. Musser has seen no relief to the gall stones from its use; but sometimes there is a relief to the hyperacidity that usually accompanies gall stones. After its administration, the patient can nearly always exhibit pseudo-gall stones. The treatment of cholelithiasis is not merely the treatment of a local process, but is the broad general management of a man that is sick.

Surgical Treatment. John B. Deaver, Phila.

Dr. Deaver said that disease of the gall bladder, except the mild variety, is due to some form of infection. It shows itself in two forms: the calculous and the non-calculous. In both forms there are various grades of inflammation of the gall bladder. Adhesions of the upper abdomen are sometimes so thick that the liver is never seen during the operation for stone. These adhesions are the result of delay in surgical intervention under the guise of medical treatment. The physician should not delay until hope is gone and the surgeon becomes a last resort. The indications for immediate intervention are (1) complication showing the spread of infection, and (2) symptoms of obstruction of the common duct after a reasonable interval. Other conditions demand operation, but the necessity is not so urgent. The purpose of operation is to remove the inflammation, to remove the stones, and to prevent recurrence.

Dr. Deaver then described the technique of the operation. When the structures are not normal, the procedure becomes very difficult, and one should be a master of the anatomy of the upper abdomen. It is much wiser to drain outside of the abdomen than to allow the infectious bile to flow into the duodenum. The drainage should be left in until it has accomplished its purpose and is ready to drop out. The speaker deprecated the practice of what he termed meddlesome surgery, by which he had seen patients' recovery prevented. He does not mind, even should the drains remain in for six months. Dr. Deaver considered the diet, which should be restricted.

The variety of organism causing the symptoms calls for some discrimination in operative procedures. The symptoms of streptococcus infection are much more intense than those commonly seen in the staphylococcus.

Discussion opened by E. W. Hedges, Plainfield.

The discussion on the symposium was opened by Dr. E. W. Hedges, of Plainfield, who said that he would criticise Dr. Deaver for saying that he hesitated to take out the gall bladder under certain conditions. If the source of gall stones is nearly always in the gall bladder, why not take it out when you get the chance, and thus rid the system of the possibility of a recurrence? In support of this view, Dr. Hedges quoted Mayo, who has never seen an ill effect follow the loss of this organ.

Dr. Hedges said that the fact that ten per

cent. of the autopsies performed show gall stones and that one elderly woman in every four has gall stones have a direct bearing on the treatment of this condition. If they are common in women, it must be due to the retardation of the bile caused by tight lacing. When a patient complains of persistent nausea and vomiting or of recurrent pains in the epigastric region, one should carefully palpate the region of the gall bladder. Dr. Hedges then gave the diagnostic signs of gall stone disease. In making the differential diagnosis between an enlarged gall bladder and floating kidney or tumor of the omentum, one should get the finger up under the lower rib on the right side and have the patient take an inspiration. If the tumor ascends and descends with the respiratory movement, the case is one of gall stones.

Dr. Charles P. Noble, of Philadelphia, made a defense of the gynecologists against the usual slurring remarks of the general surgeons.

Dr. Vander Veer, of Albany, emphasized the question of the rôle of typhoid fever in the production of gall stones. He has found typhoid bacilli ten or twelve years after the attack of typhoid fever, and always takes this factor into consideration. He related a case of typhoid fever in which gall stone colic developed. The patient was operated on during the acute attack and recovered.

Dr. Vander Veer believes that there are certain cases that the medical man may treat successfully, but that most patients that think they are cured by this means are not, and finally have to be operated on. When there is great distension, he is suspicious of malignant trouble. In such cases he has done gastro-intestinal anastomosis and drained the gall bladder, and this made the patient comfortable for years. It is in that condition particularly that an exploratory incision is of benefit.

Dr. Vander Veer said that it is very difficult to get patients to give up the belief that olive oil does good in some cases. He believes that the gall bladder should be allowed to drain as long as it will, which will sometimes be as long as eighteen months or two years. If it goes longer, one should reopen the wound, when a useless sac that can be dissected out will usually be discovered.

Dr. Philip Marvel, of Atlantic City, referred to the intermediate class of cases, between the very grave, demanding immediate operation, and the very mild. These he classed as (1) those that are complicated

by other diseases previously to the attack, and (2) those that are complicated by diseases following the attack of gall stone infection. He asked whether in such cases it would not be better to operate.

Dr. Harris said that the reason he had not mentioned the steeplechase temperature as characteristic of the sepsis of gall stone disease was that the paper was addressed to general practitioners, who usually have no facilities for taking the temperature at short enough intervals to demonstrate this sign. Dr. Harris said that he thought Dr. Deaver had pretty well answered Dr. Marvel's question in reference to operating in cases with complications. He believed that Dr. Musser had given the general practitioner too much encouragement to employ medical treatment.

The next paper on the program, by Daniel Strock, of Camden, "Tetanus and Anti-tetanic Serum," was read by title. It contained his results in the use of very large doses of the serum (ten cc. every two hours), by which he was able to cure three out of five well-developed cases of tetanus.

The last paper, "The Significance of Blood Pressure," etc. (see program), was also read by title.

Wednesday Afternoon.

Dr. Marcy's address was devoted to a consideration of the following points: (1) How can we elevate the standing of the medical profession in the community? (2) What is its moral responsibility? (3) What is its duty regarding some of the evils that threaten our body politic? His recommendations were: (1) A four years' course, followed by a year in a hospital before the degree is conferred, a re-examination every five years, and a comprehensive plan of post-graduate work. (2) That the members be well developed morally, with the highest ideals, and characters above reproach. (3) That the profession should use their best efforts to create a sentiment among the people against the use of liquor, and that it should report every case of abortion to the prosecuting attorney.

Dr. Waddington's paper was a comprehensive review of the history of our knowledge on the subjects of bacteria, together with their toxins and antitoxins, in many different diseases. He especially emphasized diphtheria antitoxin, and concluded that it is fair to assume that as within the past generation such marvelous progress has been made in establishing medicine on a scientific

basis, ensuing generations will have a still greater inheritance to leave to posterity.

HOW FAR MAY THE GENERAL PRACTITIONER EMPLOY AND BENEFIT FROM LABORATORY METHODS OF DIAGNOSIS.—By *Robert N. Willson, M. D., of Philadelphia.*

Internal medicine includes, primarily, an accurate diagnosis, a very little therapeutics, abundant intelligence and common sense, and every scientific method of diagnosis and treatment that can be proved to be practical and available for general use. No condition can be diagnosed completely and exclusively by means of older methods or by the new. Every known aid to accuracy must be utilized. Laboratory methods are useful and necessary in the study of disease. Without them, no study has been even part way thorough. If the general practitioner will devote to scientific medicine the odd minutes often spent over a glass or a cigar, he can save an hour out of the twenty-four. An additional hour may often be secured after his family have retired to rest. If he is too busy, he should have an assistant upon whom he can depend for accurate and prompt laboratory reports. Beginners in practice are very glad to get such work to do. They should send in their own bills, as the best means of preserving their identity. Laboratory methods can be used by the well-equipped physician as a means of dignity and self-support. Laboratory medicine has opened up a new field for the young and poor man. As he grows older it will be a comfort to him as a clinician to be able to control by first knowledge the work of his laboratory men. The family doctor has not gone, and will not go, and the specialist is here to stay. The laboratory enthusiast is another fixture. In all these classes one will occasionally find the physician who scorns no method and flouts at no school; who executes his own work perfectly, so long as it is a possible thing, and then enlists the aid of younger men, whose untempered science finds its complement in his own mellow judgment and ripe experience.

Dr. Marcy opened the discussion. He said that while it is easy for the laboratory worker and the clinician to coöperate in the city, it has not until now seemed feasible in the rural districts. It has now, however, become absolutely necessary for the country doctor to avail himself of these scientific and accurate methods. Dr. Marcy suggested that the country practitioner should take a post-graduate course of study at a medical school, and should keep in touch with

progress by means of current medical literature. Each community should have some one man that is competent to attend to laboratory investigations and willing to devote his time to them. The county medical society should be the center of graduate medical work and study, as well as for the diffusion of a knowledge of the recent discoveries and latest practical methods of treatment.

Dr. H. A. Cossett, of Morris Plains, said that it is surprising to find that some of the specimens sent for laboratory examinations are received with absolutely no history to go by. Specimens of blood are sent on a piece of glass a quarter of an inch thick, and all dried up. No wonder that laboratories cannot get out the reports that they would like.

Dr. Marvel thought Dr. Willson's suggestions quite practicable.

Thursday Morning.

The first paper, "Symposium on the Eruptive Diseases," was read by title, in the absence of its author. The first paper in the symposium was on "Scarlet Fever," by Dr. Hiram Williams, of Passaic.

SYMPOSIUM ON THE ERUPTIVE DISEASES.

Scarlet Fever. Hiram Williams, Passaic.

The writer stated that scarlet fever is one of the most fatal diseases of childhood. It is always present in large communities, and is met with in epidemic form when least expected. Season does not seem to influence its presence. Most of the patients being among school children, it is most frequent during the school term. The eruption, the pulse, and the temperature must be considered in making a diagnosis. It is usually easy to diagnose it at the first visit. The incubation is rarely longer than four days. The initial symptom is usually vomiting, which must be initial to be of value for diagnostic purposes. Sore throat follows, and is always present. It begins as a pharyngitis and becomes a tonsilitis. The diagnosis cannot be made from the throat condition alone; skin eruption is a necessity before a positive diagnosis can be made. It appears not sooner than twenty-four hours after the onset of the tonsilitis, and not later than forty-eight hours after it. Strawberry tongue appears a day or two later than the eruption. The onset of the disease is usually accompanied with a rise of temperature. In the treatment, divided into prophylactic and remedial, the author considered isolation, light diet, daily ablutions, the avoidance of chill, and gentle diuretics and laxa-

tives. The excretions and the urine should be carefully watched, and the nasopharynx should receive attention. One should be on the lookout for a rise of temperature indicating inflammation in the ear, which should be promptly attended to. Suppuration of the glands disappears as recovery progresses if the glands are not swollen. It is the complications in scarlet fever that cause most of the trouble. The author has used anti-streptococcic serum with favorable results.

Measles. Philip Marvel, Atlantic City.

The failure to find the micro-organisms in this disease does not prove that it is not caused by bacteria. Dr. Marvel described the disease and gave the points of differentiation between it and other eruptive fevers resembling it, with which it sometimes exists simultaneously.

Roethlin. Alexander McAlister, Camden.

The differential diagnosis in this disease is seldom easy. It resembles morbilli in its skin manifestations, and scarlet fever in its throat manifestations. It has no single distinctive feature, apart from the epidemic considered as a unit; yet no exanthem of this class is more distinctive. The rose-rash is the most conspicuous symptom. Another help in diagnosis is the presence or absence of the Koplik spots, which probably never appear in roethlin, but are never absent in morbilli. It is unlike morbilli, also, in the earlier eruption, of more florid hue, not crescentically arranged, and with smaller individual papules; and in the milder catarrhal symptoms. It is unlike scarlatina in not having the rapid pulse, strawberry tongue, marked fever, and grave complications of that disease. Rash is usually the first symptom observed, and is more nearly like that of morbilli than like that of any other exanthem. It persists longer than does that of either morbilli or scarlatina. In early and isolated cases, notice that the elevation and decline of temperature coincident with the spreading and fading of the rash points to scarlet fever. Extensive eruption without disturbance of temperature or considerable desquamation is not scarlet fever. A profuse rose-rash without the considerable catarrhal or febrile phenomena is probably not morbilli.

Smallpox. E. E. Worl, Newark.

After defining smallpox, Dr. Worl considers the unvaccinated classes, the conditions of liability or receptivity to the disease, the teaching of contagious diseases, and the

differential diagnosis between smallpox and other infections—chickenpox, measles and pustular syphilide. He then refers to mild epidemics of smallpox, indulges in some historic memories, and relates the prophecy of Thomas Jefferson, and winds up the paper with a plea for the necessity of vaccination.

Discussion opened by Henry J. F. Wallhauser, Newark.

Discussion was opened by Dr. Henry J. F. Wallhauser, of Newark, who confined his remarks to the differential diagnosis, which he treated at considerable length. He said that while one may surmise the possible character of the condition during the stage of invasion, one is not justified in giving a positive diagnosis until the eruption is fairly well developed. He then took up the differential diagnosis between each of the eruptive diseases and every other of these, giving the points in detail.

Dr. E. B. Silvers, of Rahway, called attention to the use of sulphide of calcium in modifying attacks of measles and as a prophylactic in that disease. He also thinks that it had a favorable effect in confluent smallpox, shortening the attack and preventing pitting.

Dr. David E. English, of Milburn, said that he believes that the diagnosis in scarlet fever can almost always be made long before desquamation. He does not think that cold baths are beneficial in scarlet fever. He is opposed to putting anything greasy on the skin in that disease to prevent the scales from coming off, as he thinks that this also prevents the excretion of poisonous matter through the skin and increases the liability to nephritis. He is likewise opposed to the quarantining of cases of measles, especially in the country, as he thinks it better for persons to have this disease in childhood. He likewise does not believe in quarantining cases of smallpox, believing that it puts the burden on the persons who are paying large sums of money to protect those who will not get vaccinated. He said that a man who would not be vaccinated once in five years ought to be imprisoned.

Dr. Frank W. Pinneo, of Newark, said that the use of potassium chlorate will prevent many of the complications in middle-ear infection from scarlet fever. The best way to employ it is in the form of a throat wash so made that no harm will ensue should some of it be swallowed.

Dr. Henry Mitchell, of Asbury Park, said that measles has never been efficiently prevented. One reason is that it is seldom rec-

ognized in its early stage, being taken for a cold. The medical inspection of schools promises something in the prophylaxis of this disease. Teachers should be taught the early signs of measles.

Dr. Harold D. Corbusier, of Plainfield, spoke of his experience with vaccination in the Philippines. He found that many that had been recently vaccinated and had had good sores were susceptible to revaccination. He attributes this to the fact that the arm had not been properly protected, the sore having been the result of infection and not of vaccination. Whenever persons say that they have had a very sore arm, he is suspicious. He is always careful to have the arm well protected from infection. He thinks that physicians should see that every child at whose birth they attend is vaccinated very early in life. Smallpox, which was rampant in the Philippine Islands, has been almost obliterated there since the Americans have taken possession.

Dr. Duncan W. Blake, of Gloucester, said that in the discrete type of smallpox and chickenpox there is no distinctive symptom in the one that is not found in the other. Therefore, errors in diagnosis must occur.

Dr. Philip Marvel, of Atlantic City, closing the discussion, said that he had mentioned prophylactic treatment of measles, but that he did not believe in the treatment of the disease *per se*. In the majority of cases there is mixed infection, and the patients frequently already suffer with intercurrent disturbances when seen. Dr. Marvel had not been aware of the existence of any specific treatment for measles. He had listened with interest to the remarks of Dr. Silvers, but he felt that the mere administration of one or another drug in a few cases of any disease with favorable results would not constitute sufficient evidence that this drug is a specific in that disease. In regard to Dr. English's remarks, Dr. Marvel thought it a rather bold declaration for any physician to state that he does not believe in quarantine for any contagious disease. We are not dealing with ideal conditions, but with conditions as we find them. The mass of ignorance among the public is the most distressing obstacle to the treatment of diseases. The physician should try to lessen this ignorance among his patients, and should insist upon as great a degree of isolation as is possible. It is believed by many clinicians that a number of the eruptive diseases are due to one primary cause, and that the environment of the individual, etc., at the time the disturbance occurs makes the

difference in the manifestation of the disease. Opposed to this view, however, is the fact that an attack of one eruptive disease does not prevent an attack of some other. The declaration that chlorate of potash is effective in preventing middle-ear disease had astonished Dr. Marvel, and he said he should take an interest in investigating its action in this class of cases. In regard to the inspection of the public schools and the instruction of the teachers regarding the early signs of measles, Dr. Marvel wished that Dr. Mitchell had gone a step further and advocated special instruction of the physicians that are made inspectors of these schools.

Dr. Worl, closing, referred to the remarks in regard to tuberculosis, made by Dr. Howard A. Kelly, of Baltimore, at the banquet the preceding evening, and said that this disease will never be controlled until you begin with the factors that create it. The measles carries off more children under two years of age than does any other disease except whooping cough, and it leaves a tendency toward enlarged glands, which are a fruitful source of tuberculosis. Dr. Worl did not believe that any one ought to have any disease that he could escape. No one likes to have even a simple, non-fatal malady. He thought that there should be a uniformity of practice in both city and country in regard to quarantining. He also was in favor of the old way of vaccinating with the scab from other human vaccinations.

Dr. English explained that he had not meant to speak against isolation as part of the treatment of measles, but only against quarantining for that disease in the country.

Dr. Williams, closing, defended the use of cold baths in scarlet fever. He had looked up literature very thoroughly, and has come to the conclusion that they do good and do not increase the tendency to nephritis.

Dr. Silvers said that he believed sulphide of calcium to have prophylactic powers, and had only wished to have it placed on trial.

Dr. Chandler said that he did not wish the impression to go out that the Medical Society of New Jersey was in favor of an enforced quarantine in smallpox. If we had as good protection against other diseases as we have against smallpox (in vaccination) he would be in favor of abolishing enforced quarantine in all diseases. In enforcing a rigid quarantine against smallpox we are punishing many innocent persons for the crimes of a few guilty ones.

Dr. Marcy endorsed these sentiments.

The paper of Dr. Margaret Brewster,

owing to her absence on account of sickness, was read by title. The general session then adjourned.

AN ALPHABETICAL LIST

Of the Members of the Medical Society of New Jersey.*

Compiled July, 1907.

- Abbott, Benjamin T., Ocean City. (5)
 Abbott, Henry D., 24 East 33d St., Bayonne. (9)
 Ackley, David B., 878 E. State, Trenton. (11)
 Adams, Chas. F., 52 W. State, Trenton. (11)
 Adams, Ellsworth S., Beverly. (3)
 Adams, John K., 475 Main St., Orange. (7)
 Adams, J. O., 937 N St., N. W., Washington, D. C.
 Adsit, Noble H., Succasunna. (14)
 Agnew, Frank E., 29 Hamilton, Paterson. (16)
 Albano, Giuseppe, 498 Chester Ave., Newark. (7)
 Albertson, William C., Belvidere. (21)
 Albright, John C., 194 Broadway, So. Amboy (12)
 Alexander, Archibald F., 379 Union av., Paterson.
 Alexander, Walter G., 67 Oakwood Ave., Orange.
 Allen, Edgar, Pattenburg. (10)
 Allen, Ulamor, 401 Ogden Ave., Jersey City. (9)
 Allen, William C., Blairstown. (21)
 Allers, Henry, 109 Harrison Ave., Harrison. (9)
 Allis, Jeremiah A., 386 Park St., Upper Montclair.
 Ames, Elmer H., 17 Madison Ave., Jersey City. (9)
 Anderson, Calvin, Madison (14)
 Anderson, Wm. Edgar, Englishtown. (13)
 Andress, T. H., Sparta. (19)
 Applegate, Asher T., Englishtown. (13)
 Ard, Frank C., Plainfield. (20)
 Areson, Wm. H., 153 Blvu. ave., Upper Montclair.
 Arlitz, William J., 803 Hudson St., Hoboken. (9)
 Armstrong, Alex., 323 S. Broad, Trenton. (11)
 Armstrong, Edw. C., 512 Fulton, Town of Union.
 Armstrong, Samuel E., Rutherford. (2)
 Arthur, Francis M., Hamilton Square. (11)
 Ashcraft, Samuel F., Mullica Hill. (7)
 Asher, Maurice, 20 Court, Newark. (7)
 Asnis, Eugene J., Woodbine. (5)
 Atherton, A. L., 1005 Pacific ave., Atlantic City.
 Atkinson, James W., 27 Church, Paterson. (16)
 Ayres, Melancthon S., Ridgefield. (2)
 Bacevycze, Anthony M., 119 Madison Ave., New'k.
 Baer, Joseph S., 505 Stevens St., Camden. (4)
 Bailey, Charles H., 189 Liberty, Bloomfield. (7)
 Bailey, Frederick R., 1165 E. Jersey, Elizabeth.
 Bailey, Wilson G., B'dway and Pine, Camden. (4)
 Bailey, Wm. O., 282 S. Orange Ave., Newark. (7)
 Baird, David, Jr., Florence. (3)
 Baker, Charles F., 47 Walnut, Newark. (7)
 Baker, E. Mills, 103 Wayne St., Jersey City. (9)
 Baker, George H., Long Branch. (13)
 Baker, Raymond D., Summit. (14)
 Baldwin, Aaron K., 291 Plane, Newark. (7)
 Baldwin, Sam'l H., 479 Clinton Ave., Newark. (7)
 Baldwin, Winfred E., 462 Orange, Newark. (7)
 Balleray, George H., 115 B'way, Paterson. (16)
 Banker, Pierre A., 1156 E. Jersey, Elizabeth. (20)
 Banks, Hardy M., Englewood. (2)
 Banta, John H., 119 Broadway, Paterson. (16)
 Barbash, Samuel, 1906 Pacific ave., Atlantic City.
 Barber, Isaac, Phillipsburg. (21)
 Barnes, William M., Springfield. (20)
 Barrington, Richard C., Mt. Holly. (3)
 Bartlett, Clara K., 11 No. N. Car. ave., Atlantic C.
 Barwis, Elmer, 211 Hamilton ave., Trenton. (11)
 Barrows, Arthur M., 300 S. Clinton, Trenton. (11)
 Bateman, Frank M., Cedarville. (6)
 Baumann, John J., 126 Mercer St., Jersey City.
 Baumann, Louis, 250 5th, Jersey City. (9)
 Beach, Edward M., West Long Branch. (13)
 Beatty, Enos E. B., Newton. (19)
 Beatty, Henry M., 50 Centre, Trenton. (11)
 Bebout, Theodore W., Stirling. (14)
 Becker, Gustav A., Morristown. (14)
 Becker, Frederick W., 478 Clinton St., Newark.
 Becket, George C., 135 N. Walnut, East Orange.
 Beekman, John B., Pluckamin. (18)
 Belling, Chris. C., 1098 Broad St., Newark. (14)
 Bell, J. Finley, Englewood. (2)
 Benedict, Alfred C., 69 Ward Pl., S. Orange. (7)
 Benjamin, Dowling, 215 Cooper St., Camden. (4)
 Bennett, Chas. D., 167 Clinton Ave., Newark. (7)
 Bennett, John K., Gloucester City. (4)
 Bennett, John W., Long Branch. (13)
 Bennett, Reginald S., Asbury Park. (13)
 Bentley, David F., 829 Elm St., Camden. (4)
 Bergin, Joseph V., 19 Church, Paterson. (16)
 Best, George N., Rosemont. (10)
 Beveridge, William W., Asbury Park. (13)
 Bianchi, Angelo R., 104 7th Ave., Newark. (7)
 Bicker, Francis J., Fillmore St., Camden. (4)
 Bilderbach, Francis, Salem. (17)
 Bingham, Arthur W., 299 Main, East Orange. (7)
 Bissett, John J., Main St., South River. (12)
 Blair, J. E., Burlington. (3)
 Blake, Duncan W., Gloucester City. (4)
 Blanchard, Oliver R., 37 Clinton Ave., Jersey City.
 Bleick, Theo. E., 340 Waverly Ave., Newark. (7)
 Bleick, Wm. D., 517 Clinton Ave., Newark. (7)
 Blenckstone, Fred. O., Oradell. (2)
 Bleyle, Herman C., 15 Walnut, Newark. (7)
 Bloom, David M., 235 S. 6th St., Newark. (7)
 Blundell, William, 99 Fair, Paterson. (16)
 Boone, William C., Plainfield. (20)
 Bogardus, Henry J., 427 Bergen Ave., Jersey City.
 Borgmeyer, J. G. Lewis, 67 W. 8th, Bayonne. (9)
 Bossard, Harry B., Harmony. (21)
 Bossert, Leon H., Newport. (6)
 Bowden, David T., 117 Paterson, Paterson. (16)
 Bowyer, Frank F., 262 Barrow St., Jersey City. (9)
 Boyle, Thomas P., 110 Belleville Ave., Newark. (7)
 Boysen, Theophilus H., Egg Harbor. (1)
 Braddock, Charles S., Jr., Haddonfield. (4)
 Bradford, Edward B., Port Norris. (6)
 Bradford, Stella S., Montclair. (7)
 Bradner, Frederick C., Englewood. (2)
 Bradshaw, John H., 27 High St., Orange. (7)
 Brasefield, Edgar N., Phillipsburg. (21)
 Braun, Rudolph, 180 Polk, Newark. (7)
 Bray, Walter S., 902 N. 2d St., Camden. (4)
 Brewer, William, Woodbury. (8)

*The figures in parentheses indicate the county society to which the member belongs. The following is a list of the counties with their respective numbers:

Atlantic (1); Bergen (2); Burlington (3); Camden (4); Cape May (5); Cumberland (6); Essex (7); Gloucester (8)
 Hudson (9); Hunterdon (10); Mercer (11); Middlesex (12); Monmouth (13); Morris (14); Ocean (15); Passaic (16); Salem
 (17); Somerset (18); Sussex (19); Union (20); Warren (21).

- Brewster, Margaret P., Grantwood. (2)
 Bridges, Isabel M., 497 Mt. Pleasant Ave., Newk.
 Brien, William M., 585 Valley Rd., W. Orange.
 Brinkerhoff, Henry H., 695 Bergen Ave., Jersey C.
 Briody, James F., 385 Main, Paterson. (16)
 Britton, Chas. P., 126 W. State, Trenton. (11)
 Broderick, John J., 355 Pacific Ave., Jersey City.
 Brooke, William W., 915 Ave. C, Bayonne. (9)
 Brouwer, Frank, Toms River. (15)
 Brown, Harvey S., Freehold. (13)
 Brown, James S., 43 S. Fullerton ave., Montclair.
 Browne, J. Alex., 310 Grand, Paterson. (16)
 Bruckner, Charles H., 118 Newton, Newark. (7)
 Brundage, Philip Edwin, Grantwood. (2)
 Bruyere, John, 123 Perry, Trenton. (11)
 Buchanan, J. Hervey, North Plainfield. (18)
 Buckingham, Frederick S., Lakewood. (15)
 Buerman, William, 352 Belmont Ave., Newark.
 Bull, Edward L., 2 Madison Ave., Jersey City. (9)
 Bullen, Victor E., 148 Hamilton ave., Paterson.
 Bunting, P. DuBois, 11 3d, Elizabeth. (20)
 Burd, Lewis S., Ogdensburg. (19)
 Burd, William J., Belvidere. (21)
 Burke, Charles V., 537 E. Ferry St., Newark. (7)
 Burnett, Hayes J., 25 Orange Road, Montclair.
 Burnett, Thomas F., 253 Court, Elizabeth. (20)
 Burnette, Henry H., 729 Wash'gton St., Hoboken.
 Burns, Edwin L., 269 Broad, Newark. (7)
 Burrage, Robert L., 383 Mt. Prospect Ave., Newk.
 Burt, Frederick C., Hammonton. (1)
 Bushey, Sylvan G., 508 Haddon Ave., Camden.
 Buttler, Charles V., 139 Albany, New Bruns. (12)
 Buttner, Carl, Day St. cor. White St., Orange. (7)
 Buvinger, Charles W., 5 S. Arlington Ave., E. O.
 Calhoun, Charles, Rutherford. (2)
 Campbell, Charles M., 642 Main, Paterson. (16)
 Campbell, Dundas Ralph, 442 Warren, Newark.
 Campbell, Wellington, Short Hills rd, Short Hills.
 Campbell, William K., Long Branch. (13)
 Cantwell, Frank V., 78 N. Clinton ave., Tren. (11)
 Carhart, Henry O., Blairstown. (21)
 Carman, Fletcher F., 129 Walnut, Montclair. (7)
 Carman, John H., Plainfield. (20)
 Carpenter, Abram E., Boonton. (14)
 Carpenter, William H., Salem. (17)
 Carrigan, Eugene E. S., Point Pleasant. (15)
 Carroll, Alexander J., Morris Plains. (14)
 Carroll, Edgar, Main, Dayton. (12)
 Carroll, William H., 119 Jefferson, Passaic. (16)
 Casperson, Robert, 215 N. 3d St., Camden. (4)
 Cassaday, John B., Burlington. (3)
 Case, Levi W., 41 Park, Montclair. (7)
 Cater, Douglas A., 107 Park, E. Orange. (7)
 Chandler, Henry M., 408 Main, Orange. (7)
 Chandler, Wm. J., 65 S. Orange ave., So. Orange.
 Chambers, Talbot R., 15 Exchange Pl., Jersey City
 Chapman, Ellis J., Shiloh. (6)
 Chard, John A., 14 Virginia Ave., Jersey City. (9)
 Charlesworth, Irving E., Bridgeton. (6)
 Charlesworth, Ralph R., Millville. (6)
 Chattin, J. Franklin, 40 W. State, Trenton. (11)
 Chavanne, Henry, Salem. (17)
 Chew, Elisha C., 28 So. Ky. ave., Atlantic City.
 Child, Frank M., 927 Washington St., Hoboken.
 Christian, Albion C., Irvington. (7)
 Cladek, Walter E., Rahway. (20)
 Clark, A. Schuyler, 531 Madison ave., N. Y. (12)
 Clark, Emma C., Dover. (14)
 Clark, J. Henry, 12 Walnut, Newark. (7)
 Clark, Staats V. D., 89 Bayard, New Bruns. (12)
 Clark, William A., 51 W. State, Trenton. (11)
 Clawson, Marcus L., Plainfield. (20)
 Clay, Thomas A., 30 Sheridan ave., Paterson. (16)
 Clossen, Edward W., Lambertville. (10)
 Coe, Richard, 11 Warren, Newark. (7)
 Cohen, Nathan A., Wildwood. (5)
 Cohn, Herman, 281 Mulberry St., Newark. (7)
 Coit, Henry L., 277 Mt. Prospect Ave., Newark.
 Cole, Martin, Hainesville. (19)
 Coleman, Joseph G., Hamburg. (19)
 Coles, J. Ackerman, Scotch Plains. (20)
 Colie, Edward Martin, 109 Prospect, E. Orange.
 Collier, William S., 723 S. Broad, Trenton. (11)
 Conaway, Walt P., 1723 Pac. ave., Atlantic City.
 Conduct, Arthur W., Dover. (14)
 Conduct, Isaiah W., Dover. (14)
 Condon, John F., 168 Washington, Belleville. (7)
 Condon, William J., 336 George, New Bruns. (12)
 Conover, E. E., Hasbrouck Heights. (2)
 Conover, John H. P., 1077 E. Jersey, Elizabeth.
 Conrad, Edgar K., Hackensack. (2)
 Converse, Charles B., 218 Palisade Ave., Jersey C.
 Cook, Frank B., Laurel Springs. (4)
 Cook, Hugh F., 15 Roseville Ave., Newark. (7)
 Cook, Mary, 16 James St., Newark. (7)
 Cook, Richard L., Dover. (14)
 Cooke, Henry G., 7 Livingston av., New B. (12)
 Cooper, Edward P., Parsippany. (14)
 Cooper, J. Howard, East Millstone. (18)
 Corbusier, Harold D., Plainfield. (20)
 Cornwell, Alfred, Bridgeton. (6)
 Corrigan, George F., 344 Lafayette St., Newark.
 Corson, Elton S., Bridgeton. (6)
 Cort, Paul L., 144 W. State, Trenton. (11)
 Corwin, Fred M., 696 Ave. C, Bayonne. (9)
 Corwin, Theodore W., 5 W. Park, Newark. (7)
 Cory, Horace C., 224 Broad, Newark. (7)
 Cossitt, Harry A., Morris Plains. (14)
 Costill, Henry B., 506 E. State, Trenton. (11)
 Coultas, Aldo B., Madison. (14)
 Craig, Burdette P., 61 Highland Ave., Jersey City.
 Cramer, Alfred, Jr., 218 N. 5th St., Camden.
 Cramer, Isaac S., Flemington. (10)
 Crane, Josiah Wellington, 17 Bank, Newark. (7)
 Crater, Ellis W., Ocean Port. (13)
 Crawford, David H., 331 Belleville, Newark. (7)
 Craythorn, John C., 302 W. State, Trenton. (11)
 Cregar, Peter B., Plainfield. (20)
 Cropper, Charles W., 85 Gifford Ave., Jersey City.
 Cross, Anna M., 20 Marshall, Newark. (7)
 Crounse, David R., 84 Bloomfield ave., Pas. (16)
 Culver, D. LeRoy, 287 York St., Jersey City. (9)
 Culver, George M., 49 Tonnelle Ave., Jersey City.
 Culver, S. Herbert, 98 Magnolia Ave., Jersey City.
 Cummins, G. Wyckoff, Belvidere. (21)
 Curtis, Frank W., Stewartsville. (21)
 Curtis, James H., 30 Church, Paterson. (16)
 Curtis, Robert M., 30 Church, Paterson. (16)
 Currie, Daniel A., Englewood. (2)
 Currie, Norman W., Plainfield. (20)
 Cuskaden, Albert D., 2 So. Mich. ave., Atlantic C.
 Dallas, Alexander, 24 E. 22d St., Bayonne. (9)
 Danzis, Max, 46 Mercer St., Newark. (7)
 Darnall, W. Edgar, 1704 Pacific av., Atlantic City.
 Davenport, George S., Garfield. (16)
 Davenport, Peter B., Vailsburgh. (7)
 Davis, Henry H., 569 Benson St., Camden. (4)
 Davis, Henry V., North Branch. (18)
 Davis, John B., 6th and Lawrence Sts., Camden.
 Davis, Richard M., Salem. (17)
 Davis, William A., 511 Cooper St., Camden. (4)
 Davis, Wm. H. K., 42 N. Arlington av., E. Orange
 Davis, W. Price, 1721 Pacific ave., Atlantic City.
 Davison, C. K., Stanhope. (19)
 Day, Grafton E., 427 Haddon Ave., Camden. (6)
 Day, Harry V., Butler. (14)
 Dearborn, Reuben B., Basking Ridge. (20)
 Decker, Clinton L., Boonton. (14)

- Dedrick, Thomas S., Washington. (21)
 De Grofft, Eugene E., Woodstown. (17)
 DeGroot, George S., Mendham. (14)
 DeJager, Simon, 83 Bridge, Paterson. (16)
 Demarest, Frederick F. C., 29 Academy, Passaic.
 DeHart, Clara M., 99 Mercer, Jersey City. (9)
 DeMerritt, Chas. L., 394 Clinton Ave., W. Hobo'n.
 De Mund, Cornelius A., Ridgewood. (2)
 De Mund, John F., Ridgewood. (2)
 Denner, Edward F., 221 B'dway, Paterson. (16)
 Dennis, John, 287 Belleville Ave., Newark. (7)
 DeVausney, Winfield S., 102 Central Ave., New'k.
 Devlin, Frank, 98 Congress, Newark. (7)
 Devlin, Hugh Joseph, 167 Orchard, Newark. (7)
 Dey, Addison H., 430 E. State, Trenton. (11)
 Diamant, Edward L., Bridgeton. (6)
 Dias, Joseph L., 91 S. 19th St., Newark. (7)
 Dickinson, Ernest L., 100 Greenwood ave., T. (11)
 Dickinson, Gordon K., 280 M'tgomery St., Jer. C.
 Dieffenbach, Richard G. P., 222 S. Orange Av., N.
 Dill, Daniel M., 425 S. Orange Ave., Newark. (7)
 Dinglestedt, Richard H., 300 Hudson, Hoboken.
 Disbrow, Edwin C., Toms River (15)
 Disbrow, Rem Lefferts, Toms River. (15)
 Disbrow, Vanderhoef M., Lakewood. (15)
 Disbrow, Wm. S., 151 Orchard St., Newark. (7)
 Diverty, Henry B., Woodbury. (8)
 Dix, J. Morgan, Cape May C. H. (5)
 Dodge, Walter, 32 Cleveland St., Orange. (7)
 Dodson, Louis W., 660 Jersey Ave., Jersey City.
 Donges, John W., 525 Broadway, Camden. (4)
 Dolan, Thomas E., 250 1st ave., Elizabeth. (20)
 Dolphin, Michael O. F., 112 N. 4th, Harrison. (9)
 Donahue, Lucius F., 33 Dodge St., Bayonne. (9)
 Donohue, Frank B., 389 Main, Paterson. (16)
 Donohue, Frank M., 139 Albany, N. Bruns. (12)
 Donovan, Alfred Q., 132 E. Jersey, Elizabeth. (20)
 Dougherty, Arthur C., 158 Washington, Newark.
 Douglas, James, Morristown. (14)
 Douglass, John S., Tuckahoe. (5)
 Drake, Francis J., Phillipsburg. (21)
 Dubell, John E., Columbus. (3)
 Duckett, Warren J., 932 Summit Ave., Jersey C.
 Duffell, Charles, Salem. (17)
 Duffield, Elias M., Glassboro. (8)
 Duncan, Owsley B., Haledon. (16)
 Dundon, Arthur H., North Plainfield. (18)
 Dunkel, Edwin K., 278 M'tgomery St., Jersey City.
 Dunlap, Mary J., Vineland. (6)
 Dunlap, Thomas G., 921 Pacific ave., Atlantic City.
 Dunn, Fred. V., 623 S. 3d St., Camden. (4)
 Dunning, Charles M., Franklin. (19)
 Dunning, Walter L., 533 River, Paterson. (16)
 Duryee, John L., 436 High, Newark. (7)
 Dyer, Florence A., Wilcox, Elk County, Pa. (3)
 Eagleton, Wells P., 15 Lombardy, Newark. (7)
 Eaton, Alvin R., Jr., 1157 E. Jersey, Elizabeth.
 Edwards, J. Gaunt, Williamstown. (8)
 Edwards, Sarah M., 207 Summer Ave., Newark.
 Ellis, Alfred L., Main, Metuchen. (12)
 Elmer, Matthew K., Bridgeton. (6)
 Elmer, William, 44 W. State, Trenton. (11)
 Elsing, Henry C., Ridgefield Park. (2)
 Elwell, Alfred M., 407 Cooper St., Camden. (4)
 Ely, Lancelot, Flanders. (14)
 Emerson, Linn, 234 Main St., Orange. (7)
 Endicott, George W., Plainfield. (20)
 English, David C., 363 George, New Bruns. (12)
 English, David E., Millburn. (7)
 English, James R., 830 Clinton Ave., Newark. (7)
 Enright, James G., 451½ Jersey Ave., Jersey City.
 Epstein, Henry B., 465 High, Newark. (7)
 Evans, Britton D., Morris Plains. (14)
 Everitt, Chauncey V., 38 Boyd Ave., Jersey City.
 Everitt, John R., 38 Boyd Ave., Jersey City. (9)
 Ewen, Warren L., Alloway. (17)
 Ewens, Arthur E., 1512 Pacific ave., Atlantic City.
 Ewing, E. Eldridge, Cape May. (6)
 Ewing, John H., Flemington. (10)
 Exton, James A., 75 Beach St., Arlington. (9)
 Faber, John, 289 Central Ave., Jersey City. (9)
 Faison, William F., 490 Jersey Ave., Jersey City.
 Farr, John C., Jr., 1228 Bloomfield St., Hoboken.
 Farrow, J. Willard, Dover. (14)
 Farrow, Levi, Hackettstown. (14)
 Fee, Elam K., Lawrenceville. (11)
 Felty, John C., P. O. Box 258, Trenton. (11)
 Ferguson, Benjamin W., Beemerville. (19)
 Fewsmith, Joseph, 47 Central Ave., Newark.
 Fewsmith, Joseph L., 76 Central Ave., Newark.
 Field, Edwin, Red Bank. (13)
 Finke, Charles H., 317 York, Jersey City.
 Finn, Frederick A., 157 Danforth Av Jersey City.
 Finn, Joseph F., 157 Danforth av., Jer. City. (9)
 Fischer, Arnim, 42 16th Ave., Newark. (7)
 Fischer, George, 90 Auburn, Paterson. (16)
 Fish, Clyde M., Pleasantville. (1)
 Fisher, Claudius R. P., Bound Brook. (18)
 Fisler, C. Frank, Clayton. (8)
 Fitch, George W. H., Daretown. (17)
 Fitch, Thomas S. P., 14 Prospect St., E. Orange.
 Fithian, George W., 195 High, Perth Amboy. (12)
 Fithian, Joel W., 608 Broadway, Camden. (4)
 Flitcroft, William, 510 River, Paterson. (16)
 Flagge, Frederick W., Rockaway. (14)
 Flood, G. Balleray, 279 B'dway, Paterson. (16)
 Flynn, John J., Mt. Holly. (3)
 Flynn, Thomas H., Somerville. (18)
 Fogg, Edward S., Bridgeton. (6)
 Foley, Michael F., 710 Hudson St., Hoboken. (9)
 Popeano, Joseph L., 265 4th St., Hoboken. (9)
 Forman, Archibald C., 41 W. 32d St., Bayonne.
 Forman, D. McLean, Freehold. (13)
 Forman, Howard S., 103 Jewett ave., J. City. (9)
 Forney, N. N., 50 Livingston av., N. Bruns. (12)
 Foster, George H., Rockaway. (14)
 Foster, W. Story, 111 Bloomfield Ave., Newark.
 Frace, Peter W., 106 11th St., Hoboken. (9)
 Francis, Richard P., 12 Plymouth, Montclair. (7)
 Frank, M. G., Egg Harbor. (1)
 Franklin, Geo. H., Hightstown. (11)
 Franklin, Lewis, 193 Palisade ave., Jersey City.
 Freeland, Frank, Maywood. (2)
 Freeman, Richard D., 52 Vose ave., South Orange.
 Freeman, Samuel, 314 S. Broad, Trenton. (11)
 Friele, William, 203 Palisade ave., Jersey City. (9)
 Fritts, John T., Plainfield. (20)
 Funk, Joseph, 615 Elizabeth ave., Eliazbeth. (20)
 Funkhauser, Edw. B., P. O. Box 258, Tren. (11)
 Fyfe, George D., 540 Bramhall ave., J. City. (9)
 Gage, Ruel S., 17 Gould Ave., Newark. (7)
 Gale, George Bancroft, Rutherford. (2)
 Galloway, Geo. E., Rahway. (20)
 Gamson, Emil, 39 W. 22nd St., Bayonne. (9)
 Garrabrant, C., 131 N. Vermont av., Atlantic City.
 Garrison, Charles C., Merchantville. (4)
 Garrison, Daniel, Pennsgrove. (17)
 Garrison, Joseph E., Ocean City. (5)
 Garside, Charles Z., 130 Garside St., Newark.
 Gaston, Mary E., Somerville. (18)
 Gaston, William F., Plainfield. (20)
 Gauch, William, 199 High, Newark. (7)
 Gelbach, Rudolph W., 809 Hudson St., Hoboken.
 Geyer, George W., Cape May C. H. (5)
 Gifford, T. Franklin, Woodbury. (8)
 Gilbert, James S., Bordentown. (3)
 Gilchrist, Charles A., 916 Hudson St., Hoboken.

- Gillé, Hugo, 149 Congress St., Jersey City.
 Gillson, John T., 391 Main, Paterson. (16)
 Gillson, Michael W., 11 Lee Pl., Paterson. (16)
 Gilman, Robert B., 85 Congress St., Jersey City.
 Githens, T. S., 1004 Pacific ave., Atlantic City. (1)
 Glazebrook, Francis H., Morristown. (14)
 Glendon, Walter P., Cedarville. (6)
 Gluckman, Isaac E., 70 Wickliffe, Newark. (7)
 Godfrey, Edmund L. B., 400 Linden, Camden. (4)
 Goldberg, Eugene H., 238 Kearny av., Kearny (9)
 Good, William T., Bridgeton. (17)
 Goodwin, William M., 70 Congress, Newark. (7)
 Gordon, Altamont L., Burlington. (3)
 Gordon, Clark H., 930 E. State, Trenton. (11)
 Gordon, Edward J., 1010 S. Clinton, Trenton. (11)
 Gorton, Eliot, Summit. (14)
 Graff, Effie R., Somerville. (18)
 Graves, William B., 426 Main, E. Orange. (7)
 Gray, Frank D., 673 Bergen Ave., Jersey City. (9)
 Gray, John Walter, Summit. (20)
 Gray, Thomas N., 20 Halsted, East Orange. (7)
 Green, James S., 463 N. Broad, Elizabeth. (20)
 Green, William S., 73 Paterson, Paterson. (16)
 Greenbaum, Solomon, 142 W. Kinney, Newark.
 Greenfield, B. H., 205 S. Orange Ave., Newark.
 Greenwood, Nathaniel S., Rosenhayn. (6)
 Gregory, Thirza L., Englewood. (2)
 Grier, Clarence R., 821 So. 5th, Camden. (4)
 Grier, Edgar B., 400 Westminster ave., Elizabeth.
 Griffith, John H., Phillipsburg. (21)
 Griffiths, Chauncey B., 145 Monmouth, Newark.
 Gross, Herman D., Main, Metuchen. (12)
 Griswold, James B., Morristown. (14)
 Guenther, Emil E., 159 W. Kinney, Newark. (7)
 Guion, Edward, 32 So. Virg. ave., Atlantic City.
 Gutherson, Wm. F., 1080 Madison ave., Paterson.
 Gutmann, Benjamin, 418 George, New B. (12)
- Hagar, John F., 88 Ferry, Newark. (7)
 Hagen, Charles W., 224 S. Orange Ave., Newark.
 Hagerty, John F., 30 Wallace Pl., Newark. (7)
 Haggerty, Frederick W., Vienna. (21)
 Hagney, Frederick W., 69 Penn. ave., Newark.
 Haines, Edgar J., Medford. (3)
 Haines, Edward E., 134 David, So. Amboy. (12)
 Haines, Eleanor, 934 Broad, Newark. (7)
 Haines, J. Clifford, Vincentown. (3)
 Haines, J. Ridgway, Mt. Holly. (3)
 Haines, Roland I., 300 Kaighn Ave., Camden. (4)
 Haley, John J., Gloucester City. (4)
 Hall, Walter E., Burlington. (3)
 Hallett, Frederick S., Hackensack. (2)
 Halsey, Levi W., 49 Church, Montclair. (7)
 Halsey, Luther M., Williamstown. (8)
 Halsted, Charles F., Somerville. (18)
 Hamill, Patrick J., 300 Varick St., Jersey City.
 Hance, Irwin H., Lakewood. (15)
 Hand, Anna M., Cape May City. (5)
 Hand, Leslie L., Lakehurst. (6)
 Hamill, Edward H., Prudential Bldg., Newark.
 Hamil, Robert H., Summit. (20)
 Hardenburg, Dan'l S., Jr., 354 Pacific av., J. City.
 Harbert, G. Eugene, 540 Main, East Orange. (7)
 Haring, John J., Tenafly. (2)
 Harman, William J., 1162 E. State, Trenton. (11)
 Harreys, Charles W., Ridgewood. (2)
 Harris, Frank, 214 N. Warren, Trenton (11)
 Harris, Frank B., Canton. (17)
 Harris, Philander A., 26 Church, Paterson. (16)
 Harrison, Joseph B., Westfield. (20)
 Hart, Edward P., 264 Montgomery St., Jersey C.
 Hart, Hugh M., 164 Gouveneur, Newark. (7)
 Harvey, E. H., 20 N. Fla. ave., Atlantic City. (1)
 Harvey, Thos. W., Main and Hillyer sts., Orange.
- Hasking, Arthur P., 318 M'tgomery St., Jersey C.
 Haussling, Francis R., 661 High, Newark. (7)
 Haven, Samuel C., Morristown. (14)
 Havens, Walter P., Farmingdale. (13)
 Hawke, Edward S., 124 E. Hanover, Trenton (11)
 Hawkes, E. Zeh., 15 Central Ave., Newark. (7)
 Haydon, Joseph H., 22 Brientnall Pl., Newark.
 Hecht, John P., Somerville. (18)
 Hedges, Benjamin Van D., Plainfield. (20)
 Hedges, Ellis W., Plainfield. (20)
 Heintzelmann, Bert. S., 43 W. 33d St., Bayonne.
 Helfer, Samuel A., 626 Hudson, Hoboken. (9)
 Hemsath, John, 36 Spruce, Newark. (7)
 Hendrickson, Daniel D., Middletown. (13)
 Hendrickson, Henry A., Atlantic Highlands. (13)
 Henggeler, Jacob H., 47 Bridge, Paterson. (16)
 Henion, E. Lucas, 16 Church, Paterson. (16)
 Henriques, Henry A., Morristown. (14)
 Henry, Frank C., 134 State, Perth Amboy. (12)
 Henry, George, Flemington. (18)
 Henry, George W., 801 Walnut St., Camden. (4)
 Hepburn, William M., Freehold. (13)
 Heritage, Charles S., Glassboro. (8)
 Herold, Herman C. H., 77 Congress, Newark. (7)
 Heron, Alexander M., Lakewood. (15)
 Hetherington, Wm. L., 299 Varick St., Jersey City.
 Hewlings, J. W., Moorestown. (4)
 Hicks, William H., 425 So. Orange Ave., Newark.
 Hill, Christopher D., 299 York St., Jersey City.
 Hillegas, Eugene Z., Mantua. (8)
 Hilliard, W. T., Salem. (17)
 Hinckley, Livingston S., 182 Clinton Ave., New'k.
 Fires, Nathaniel S., Salem. (17)
 Hirst, Levi B., 586 Federal St., Camden. (4)
 Hoagland, B. W., Woodbridge. (20)
 Hoagland, Garret C., Keyport. (13)
 Hoagland, Lewis B., Oxford. (21)
 Hoell, Conrad G., 565 Benson St., Camden.
 Hoening, Charles E., 928 Hudson St., Hoboken.
 Hoffman, Peter, 209 Pavonia ave., Jersey City. (9)
 Holcombe, Chas. H., 41 W. State, Trenton. (11)
 Holden, Edgar, Jr., 617 Mt. Prospect av., Newark.
 Holler, Henry B., 234 Montclair ave., Newark.
 Hollingshead, I. W., 123 S. 18th St., Phila. (3)
 Hollingshead, Enoch, Pemberton. (3)
 Hollingshead, Lyman, Pemberton. (3)
 Hollister, L. Eugene, 138 Clinton Ave., Newark.
 Holmes, Edwin, Englewood. (2)
 Holmes, George J., 17 Pennington, Newark. (7)
 Hood, Bruno, Newton. (19)
 Horning, Frank L., 623 Market St., Camden. (4)
 Horsford, Fred. C., Morris Plains. (14)
 Houck, William J., 110 Bloomfield Ave., Newark.
 Howard, Emory E., Somers Point. (1)
 Howard, J. Edgar, Haddonfield. (4)
 Howard, Joseph T. D., Washington, D. C. (6)
 Howley, Barth. M., 421 George, New Bruns. (12)
 Huger, Joseph, Fort Lee. (2)
 Hughes, Fred J., North Plainfield. (18)
 Hughes, Morgan D., Branchville. (19)
 Hummel, Lester H., Salem. (17)
 Hunt, A. Clark, Holly, Metuchen. (12)
 Hunt, Joseph, Huntsville. (19)
 Hunt, Ralph H., 29 Harrison St., E. Orange. (7)
 Hunter, James, Jr., Westville. (7)
 Hurff, Joseph E., Blackwood. (4)
 Hussler, Siegfried, 273 S. 6th St., Newark. (7)
 Husted, Frank B., Quinton. (17)
 Hutchinson, A. Dunbar, 419 Chestnut av., Trenton.
- Ill, Charles L., 188 Clinton Ave., Newark. (7)
 Ill, Edward J., 1002 Broad, Newark. (7)
 Ingling, Harry W., Freehold. (13)
 Ireland, Milton S., 23 So. Cal. ave., Atlantic City.
 Iszard, William H., 411 N. 4th St., Camden. (4)

- Jackson, Andrew J., Matawan. (13)
 Jacob, Albert N., Sparta (19)
 Jacob, William H., 95 N. Main, Paterson. (16)
 Jacobson, Frederick C., 969 Broad, Newark. (7)
 Jacquemin, T. J., 506 Clinton av., West Hoboken.
 Jacques, J. Eugenia, 74 Waverly St., Jersey City.
 Jaffe, Joseph, Woodbine. (5)
 Jaquith, Walter A., Broad and Market, New. (9)
 James, Henry C., Mays Landing. (1)
 James, William H., Pennsville. (17)
 Janeway, Henry H., 11 Livingston av., N. B. (12)
 Janney, Joshua D., Cinnaminson. (3)
 Jarrett, Harry, 925 Broadway, Camden. (4)
 Jedel, Meyer, 362 Warren, Newark. (7)
 Jenkins, Mozart, 136 Walnut ave., Trenton. (11)
 Jennings, Chas. H., Centre St., Merchantville. (4)
 Jennings, William B., Haddonfield. (4)
 Johnson, Fred L., Stanton. (10)
 Johnson, George L., Morristown. (14)
 Johnson, Henry T., Pedricktown. (17)
 Johnson, John C., Blairstown. (21)
 Johnson, Jotham C., 11 Tichenor, Newark. (7)
 Johnson, Samuel, Asbury Park. (13)
 Johnson, Walter B., 170 B'dway, Paterson. (16)
 Jonah, W. E., 1616 Pacific ave., Atlantic City. (1)
 Jones, Edward W., Layton. (19)
 Jones, Ferdinand, Millville. (6)
 Jones, J. Morgan, 2800 Boulevard, J. City. (9)
 Jones, Ralph R., Toms River. (15)
 Jones, William S., 301 Penn St., Camden. (4)
 Joy, J. Addison, 1920 Pacific ave., Atlantic City.
- Kain, William W., 5th and Pine Sts., Camden. (4)
 Kane, Charles J., 349 Grand, Paterson. (16)
 Kane, Thomas J., 349 Grand, Paterson. (16)
 Kaufman, Ernest, 55 New, Newark. (7)
 Keefe, Stephen J., 1063 E. Jersey, Elizabeth. (20)
 Keegan, Thomas J., 838 Grand St., Jersey City.
 Keenan, J. Herbert, 22 W. Jersey, Elizabeth. (20)
 Keim, William F., 7 Roseville Ave., Newark.
 Kelchner, William Irwin, 942 Cooper St., Camden.
 Keller, Frank J., 379 Totowa ave., Paterson. (16)
 Kensinger, William, 733 N. 27th St., Camden. (4)
 Kent, George R., 37 8th Ave., Newark. (7)
 Kent, Morton M., 231 N. Warren, Trenton. (11)
 Kerns, Francis J., 384 Central ave., Newark. (7)
 Kice, Henry W., Wharton. (14)
 Kimball, Paul T., Lakewood. (15)
 Kinch, Frederick A., Westfield. (20)
 King, Geo. E., Hud. Co. Asylum, Secaucus. (9)
 Kinmouth, William R., Farmingdale. (13)
 Kip, Henry, 90 Fair, Paterson. (16)
 Kipp, Charles J., 560 Broad St., Newark. (7)
 Kirk, Grant E., 1801 Broadway, Camden. (4)
 Kirkman, Leroy G., 256 Orange St., Newark. (7)
 Kitchen, Joseph M. W., 94 Prospect, East Orange.
 Kirsten, A. John, 287 Varick St., Jersey City. (9)
 Klein, Maurice I., 127 Wickliffe, Newark. (7)
 Knecht, Cyrus, Matawan. (13)
 Knight, Samuel R., Spring Lake. (13)
 Knowles, Francis E., 162 S. Orange av., S. Orange
 Koch, George J. P., 130 Beech, Paterson. (16)
 Koch, Louis A., 20 Orchard, Newark. (7)
 Koppel, Joseph, 244 Grove St., Jersey City. (9)
 Korneman, Henry A., 262 15th Ave., Newark. (7)
 Korngut, Samuel, 127 Bond, Elizabeth. (20)
 Kudlich, William L., 408 Hudson St., Hoboken.
 Kuehn, Richard, 1118 Summit ave., Jer. City. (9)
 Kumpf, Reba Lloyd, Bridgeton. (6)
 Kyte, Calvin F., 77 Garrison, Jersey City. (9)
- Laird, George S., Westfield. (20)
 Lake, William A., Erma. (5)
 Lalor, William S., 220 N. Warren, Trenton. (11)
 Lambert, Frederick E., 157 Ocean ave., J. City (9)
- Lamont, George F. M., 194 Clinton Ave., Newark.
 Lampson, Mortimer, 322 Pacific ave., J. City. (9)
 Lamson, William J., Summit. (20)
 Lane, Frank B., 528 Main St., East Orange. (7)
 Lansing, James B. W., Tenaft. (2)
 LaRiew, Frederick J., Washington. (21)
 Lautmann, John, 297 4th St., Jersey City. (9)
 Laws, George C., Paulsboro. (8)
 Lawrence, Alfred, 1086 Elizabeth ave., Elizabeth.
 Lawrence, William H., Jr., Summit. (20)
 Leach, Alonzo L., Cape May City. (5)
 Leal, John L., 156 Ellison St., Paterson. (16)
 Leavitt, John F., 520 N. 3d St., Camden. (4)
 Lee, Bernard R., 901 Pacific ave., Atlantic City.
 Lee, Stephen G., 25 Halsted, East Orange. (7)
 LeFevre, Adrienette, Blackwood. (4)
 Lehlbach, Charles F., 537 High, Newark. (7)
 Leidy, Edward D., Flemington. (10)
 Leonard, Isaac E., 28 No. Iowa ave., Atlantic City.
 Levy, Julius, 298 Bank, Newark. (7)
 Lewis, Alfred A., Morristown. (14)
 Lewis, George Rae, 481 Summer Ave., Newark.
 Leyenberger, Samuel B. W., 98 3d Ave., Newark.
 Limeburner, Chas. A., 79 Danforth ave., J. C. (9)
 Lindley, Charles L., Lakewood. (15)
 Lippincott, A. Haines, 21 Broadway, Camden. (4)
 Lippincott, Jesse D., 304 Summer Ave., Newark.
 Litchfield, Paul N., 1100 Kaighn Ave., Camden.
 Livengood, Horace R., 1105 E. Jersey, Elizabeth.
 Livengood, Theodore F., 1105 E. Jersey, Elizabeth.
 Lockwood, Frank W., 237 Prospect, East Orange.
 Loeb, Alfred A., 347 Littleton Ave., Newark. (7)
 Long, Herbert W., 102 Jefferson, Newark. (7)
 Long, Isaac S., Freehold. (13)
 Long, Monroe D., Plainfield. (20)
 Long, William H., Jr., Somerville. (18)
 Loper, John C., Bridgeton. (6)
 Lore, Harry E., Fairton. (6)
 Loweree, Thomas W., 30 Hill, Newark. (7)
 Lowrey, James H., 79 Congress, Newark. (7)
 Lucas, Henry H., 192 Van Houten, Paterson. (16)
 Luck, Paul M. K., 174 Monroe, Passaic. (16)
 Luffbary, M. Jones, Glassboro. (8)
 Lummis, Marshall F., Holly Beach. (5)
 Lund, John L., 181 High, Perth Amboy (12)
 Luther, Calista V., 151 Scotland rd., So. Orange.
 Lyon, Leslie C., Magnolia. (4)
- Maas, Max A., 489 High St., Newark. (7)
 MacAlister, Wm. Wallace, 21 Church, Paterson.
 MacDowall, John L., 129 Smith, Perth Am. (12)
 Mace, Margaret, Angelsea. (5)
 MacKenzie, Thos. H., 528 E. State, Trenton. (11)
 Mackintosh, M. Alex., 237 Broadway, Paterson.
 Maclay, Joseph A., 239 B'dway, Paterson. (16)
 MacLaren, William S., Princeton. (11)
 MacMillan, Geo. W., Lakewood. (15)
 Macwithey, Amasa A., Riverdale. (14)
 Madden, E. H., Absecon. (1)
 Madden, T. W., 831 Haddon Ave., Collingswood.
 Madden, Walter, 324 S. Broad, Trenton. (11)
 Magennis, Bryan C., 81 Bridge, Paterson. (16)
 Maghee, James M., 7 Main St., W. Orange. (7)
 Magner, John J., 666 Jersey ave., Jersey City. (9)
 Mahaffey, Jesse L., 537 N. 7th St., Camden. (4)
 Mallalieu, Frank W., 16 Monticello av., Jersey C.
 Mallon, Peter S., Morris Plains. (14)
 Mancusi-Ungaro, L., 86 Mt. Prospect Ave., Newk.
 Marcy, Alex. Jr., Riverton. (3)
 Marcy, Alexander Sr., Riverton. (4)
 Marcy, Frederick W., 6th and Pine Sts., Camden.
 Marcy, John W., Merchantville. (4)
 Marcy, Virgil M. D., Cape May. (5)
 Mander, A. J., Millville. (6)
 Markley, Paul H., 515 Cooper St., Camden, (4)

- Marks, Edward G., 655 Kearny ave., Arlington.
 Marsh, Elias J., 600 Park ave., Paterson. (16)
 Marsh, Elias J., Jr., 24 Church, Paterson. (16)
 Marshall, Joseph C., 1517 Pacific av., Atlantic City.
 Marshall, Joseph C., Tuckahoe. (5)
 Marshall, Randolph, Tuckahoe. (5)
 Martin, Thaddeus P., 46 Spring, Trenton. (11)
 Martindale, J. Watson, 2501 Federal St., Camden.
 Martinetti, Carlo, 139 Centre, Orange. (7)
 Martland, William H., 1138 Broad, Newark. (7)
 Marvel, Emery, 811 Pacific ave., Atlantic City. (1)
 Marvel, Philip, 1616 Pacific ave., Atlantic City.
 Matthews, Henry E., 12 Hillside, Orange. (7)
 Matthews, William J., 1009 Garden St., Hoboken.
 Mayhew, Charles H., Millville. (6)
 Mayhew, Samuel D., Bridgeton. (6)
 McAlister, Alex., 582 Federal St., Camden. (4)
 McBride, Andrew F., 397 Main, Paterson. (16)
 McCabe, Thomas S., 234 Lafayette St., Newark.
 McClendon, Cæsar P., 48 Fair, Paterson. (16)
 McCloughan, Harvey J., Newton. (19)
 McCormick, Daniel L., 253 Mulberry, Newark. (7)
 McCormick, Henry D., Verona. (7)
 McConnell, Joseph K., Cranford. (20)
 McCoy, John C., 292 B'dway, Paterson. (16)
 McDede, Frank, 908 Main, Paterson. (16)
 McElhinney, Dennis R., 626 Eliz. ave., Elizabeth.
 McElroy, Lee, 925 Elizabeth ave., Elizabeth. (20)
 McFadden, George Howard, Hackensack. (2)
 McGill, John D., 16 Gifford ave., Jersey City. (9)
 McGlennon, Wm. B., 310 Central av., E. New. (9)
 McGuire, James J., 330 S. Broad, Trenton. (11)
 McKenzie, William H., 942 Broad, Newark. (7)
 McLaughlin, George E., 41 Crescent av., J. C. (9)
 McLean, John J., 430 Hoboken ave., J. City. (9)
 McLean, Thomas N., 1144 E. Broad, Elizabeth.
 McLoughlin, Thomas J., 558 Jersey ave., J. C. (9)
 McMurtrie, William A., Morristown. (14)
 McNamara, Thos. C., 613 Hudson St., Hoboken.
 McNeeney, Claude E., 116 Mercer St., Jersey C.
 MeVay, J. C., 707 Pacific ave., Atlantic City.
 McWilliam, John F., Somerville. (18)
 Mead, Sarah R., 16 James, Newark. (7)
 Mecray, James, Cape May City. (5)
 Mecray, Paul M., 405 Cooper St., Camden. (4)
 Megaro, Panerazio, M., 313 High, Newark. (7)
 Meigh, Josiah, Bernardsville. (18)
 Meinzer, Martin S., 294 Madison av., P. Am. (12)
 Melcher, William P., Mt. Holly. (3)
 Mendenhall, Clinton D., Bordentown. (3)
 Menk, Paul E., 106 Market St., Newark. (7)
 Mercer, Archibald, 31 Washington, Newark. (7)
 Mercelis, Elizabeth, 17 Plymouth, Montclair. (7)
 Merrill, Charles F., 297 Centre ave., Newark. (7)
 Merrill, John R., 15 Church, Paterson. (16)
 Merrill, William H., South Branch. (18)
 Merrins, Edward M., 29 William St., E. Orange.
 Metzger, Emma P. W., Riverside. (3)
 Meyer, Franklin L., 18 Warren St., Newark. (7)
 Meyer, William, 446 Clinton ave., W. Hob. (9)
 Mial, Leonidas L., Morristown. (14)
 Miller, H. Garrett, Millville. (6)
 Miller, John N., Newton. (19)
 Miller, William E., 1023 S. 8th St., Camden. (4)
 Mills, Clifford, Morristown. (14)
 Millsbaugh, Daniel T., 45 Totowa ave., Paterson.
 Mines, Marcus K., 532 West St., Camden. (4)
 Mitchell, Augustus J., 74 South, Newark. (7)
 Mitchell, Chas. H., 116 Centre, Trenton. (11)
 Mitchell, Henry, Asbury Park. (13)
 Mitchell, Winthrop D., 23 S. Grove, East Orange.
 Moenig, Joseph A., Park Ridge. (2)
 Mooney, John J., 554 Jersey Ave., Jersey City. (9)
 Moore, Edward H., Asbury. (21)
 Moore, Geo. R., 259 Hamilton ave., Trenton. (11)
 Moore, John, Sussex. (19)
 Moore, John D., 424 Franklin, Bloomfield. (7)
 Moore, John H., Bridgeton. (6)
 Moore, William M., 79 Livingston av., N. B. (12)
 Montfort, Robert J., 1051 E. Jersey, Elizabeth.
 Morrill, James P., 10 Church, Paterson. (16)
 Morris, Clement, 75 Washington Ave., Newark.
 Morrison, Daniel L., 1 Elm Row, New B. (12)
 Morrison, Ephraim, Newton. (19)
 Morrison, John B., 97 Halsey St., Newark. (7)
 Mravlag, Victor, 1062 E. Jersey, Elizabeth. (20)
 Mulvaney, Edward, 485 Jersey ave., Jersey City.
 Murray, Eugene W., 91 Washington Ave., Newark
 Murray, William H., Plainfield. (20)
 Muta, Samuel A., Park Ave., West Orange. (7)
 Muttart, George W., 702 Ocean ave., Jer. City. (9)
 Nadler, Frederick C., 31 Green, Newark. (7)
 Nash, Albert B., 10 So. 13th, Newark. (7)
 Nash, Alfred B., Frenchtown. (10)
 Neare, Clifford R., 2 Hawthorne, E. Orange. (7)
 Neer, Henry C., Park Ridge. (2)
 Neer, Rush, 95 Bridge, Paterson. (16)
 Neer, William, 245 Broadway, Paterson. (16)
 Nelson, A., 105 Grand St., Jersey City. (9)
 Newcombe, Marcus W., Burlington. (3)
 Newman, Emanuel D., 81 New, Newark. (7)
 Newton, Anne B., 137 S. Orange ave., So. Orange.
 Newton, Richard C., 42 Church, Montclair. (7)
 Newton, William K., 379 Ellison, Paterson. (16)
 Nicholson, Joseph L., 400 Penn St., Camden. (4)
 Noble, Willis C., 55 S. Fullerton, Montclair. (7)
 Nolte, Henry W., 255 Mulberry, Newark. (7)
 North, Harry R., 284 Hamilton ave., Trenton. (11)
 North, James, 29 So. Tennessee av., Atlantic City.
 Norton, Horace G., 429 E. State, Trenton. (11)
 Norval, William A., 419 Main, Paterson. (16)
 Nuse, Edward F., 550½ Jersey ave., Jer. City. (9)
 Oakley, H. W., 800 Montgomery St., Jersey City.
 O'Connor, Jeremiah F., 85 Kearny ave., Kearny.
 O'Donnell, James, 82 Ward, Paterson. (16)
 Oestman, August W., 961 Summit av., J. City. (9)
 Ogden, B. Frank, Clayton. (8)
 Oliphant, Eugene T., Bridgeport. (8)
 Oliphant, Nelson B., 152 W. State, Trenton. (11)
 Oliver, David H., Bridgeton. (6)
 Opdyke, Ralph, 27 S. Fullerton, Montclair. (7)
 Osmun, Louis C., Hackettstown. (21)
 Osmun, Milton M., 611 Broadway, Camden. (4)
 Owen, Fred. Wooster, Morristown. (14)
 Paganelli, T. Richard, 401 Monroe St., Hoboken.
 Palm, Howard F., 614 N. 2d St., Camden. (4)
 Palmer, Gideon Howard, 11 Wakeman Ave., N'k.
 Parke, Henry, 9 Church, Paterson. (16)
 Parker, E. E., Pacific, cor Penn av., Atlantic City.
 Parker, Geo. H., 420 E. State, Trenton. (11)
 Parker, William J., 694 Bergen ave., J. City. (9)
 Parry, William C., Hainesport. (3)
 Parsell, Lewis B., Closter. (2)
 Parsonette, Victor, 132 W. Kinney St., Newark.
 Parsons, John C., 311 York St., Jersey City.
 Parsons, Richard H., Mt. Holly. (3)
 Partree, Homer T., Eatontown. (13)
 Paul, Frederick M., 562 High St., Newark. (7)
 Paxton, John P., 560 E. 28th, Paterson. (16)
 Payne, Joseph, Midland Park. (2)
 Pechin, Edward C., 311 N. 3d St., Camden. (4)
 Peck, Edward E., Bloomfield ave., Caldwell. (7)
 Pedrick, Charles D., Glassboro. (8)
 Pelouze, Percy S., 671 Springfield Ave., Newark.
 Pellett, Jackson B., Hamburg. (19)
 Perkins, James L., Cranford. (20)

- Petry, William, 325 S. Orange Ave., Newark. (7)
 Pettis, Albert, Plainfield. (20)
 Pettit, Alonzo, 116 W. Grand, Elizabeth. (20)
 Pezzè, Luigi, 280 4th St., Jersey City. (9)
 Phelan, Edward S., 18 South St., Newark. (7)
 Philhower, George P., Grant ave., Nutley. (7)
 Phillips, Cyrus B., Pitman Grove. (8)
 Physick, Emlen, Cape May City. (5)
 Pierson, Fred'k H., 340 Westm'ster av., Elizabeth.
 Pierson, Henry C., Roselle. (20)
 Pierson, H. Morton, Roselle. (20)
 Pierson, Stephen, Morristown. (14)
 Pierson, Theodore A., Hopewell. (11)
 Pike, Horace V., Marlboro Mills, Conn. (16)
 Pinder, David S., 203 Garden St., Hoboken. (9)
 Pinneo, Frank W., 199 Garside St., Newark. (7)
 Piskorski, Abdon V., 261 5th St., Jersey City. (9)
 Pittis, Harold, Lakehurst. (15)
 Pollak, Berthold S., 241 Grove St., Jersey City.
 Pollard, Joseph E., Chatham. (14)
 Pollard, William M., 25 So Car. av., Atlantic City.
 Poole, Louis, 521 Palisade ave., W. Hoboken. (9)
 Poor, Daniel W., 27 Ridge St., Orange. (7)
 Porteous, E. J., 811 Pacific ave., Atlantic City. (1)
 Porter, Katherine, 149 William, Orange. (7)
 Potter, Palmer A., East Orange. (7)
 Potter, Robert C., 34 Centre St., Newark. (7)
 Powell, William R., 702 Market St., Camden. (4)
 Pratt, John E., Dumont. (2)
 Pratt, William H., 406 N. 6th St., Camden. (4)
 Presley, Sophia, 333 N. 7th St., Camden. (4)
 Price, Franklin C., Imlaystown. (13)
 Price, J. Cole, Branchville. (19)
 Price, Nathaniel G., 62 Boston, Newark. (7)
 Price, T. T., Tuckerton, N. J. (3)
 Prickett, Elmer D., Mt. Holly. (3)
 Probasco, John B., Plainfield. (20)
 Probasco, Norman H., Plainfield. (20)
 Proctor, James W., Englewood. (2)
 Prout, Thomas P., Summit. (20)
 Purdy, Chas. H., 312 Montgomery St., Jersey City.
 Pyle, Wallace, 612 Bergen St., Jersey City. (9)
 Quinby, William O'G., 80 Columbia, Newark. (2)
 Quinn, Stephen T., 326 So. Broad, Elizabeth. (20)
 Rafferty, Peter J., Red Bank. (13)
 Ramsay, Wm. E., 193 High, Perth Amboy. (12)
 Randall, Charles H., 50 3d Ave., Newark. (7)
 Ranson, Briscoe B., Jr., Maplewood. (7)
 Raughley, William C., Berlin. (4)
 Read, Clinton H., 567 S. Warren, Trenton. (11)
 Read, Joshua W., 82 Park Pl., Newark. (7)
 Reading, George E., Woodbury. (8)
 Reason, John J., Carteret. (20)
 Rector, Joseph M., 307 York St., Jersey City. (9)
 Reddan, Martin W., 113 W. State, Trenton. (11)
 Reed, Eugene L., 920 Pacific ave., Atlantic City.
 Reed, J. W., Absecon. (1)
 Reed, Thomas K., 22 No. Penn. av., Atlantic City.
 Reese, James M., Phillipsburg. (21)
 Reiley, Edward A., 20 So. Tenn. av., Atlantic City.
 Reilly, John P., 215 Elizabeth ave., Elizabeth. (20)
 Reich, Siegmund A., 959 Summit ave., Jersey City.
 Reynolds, Walter, 27 So. Indiana av., Atlantic City
 Richardson, Emma M., 581 Stevens St., Camden.
 Ribbans, R. C., 15 Warren St., Newark. (7)
 Rice, J. Warren, 301 George, New Bruns. (12)
 Richman, Edward M., 252 Mulberry, Newark. (7)
 Ricord, Philip, 268 Bank, Newark. (7)
 Ridgeway, Geo. M., 140 W. State, Trenton. (11)
 Ridgway, Wm. F., 1200 Pacific ave., Atlantic City.
 Riordan, John, Carlstadt. (2)
 Risk, J. Boyd, Summit. (14)
 Ritter, John J., 16 Smith, Paterson. (16)
 Riva, Ferdinand E., 47 Bayard, New Bruns. (12)
 Roberts, D. Edgar, Keyport. (13)
 Roberts, Joseph E., 401 Broadway, Camden. (4)
 Robertson, Samuel E., 21 Walnut, Newark. (7)
 Robinson, Benjamin D., 265 Mulberry, Newark.
 Robinson, Silas E., Waldwick. (6)
 Robinson, Manning N., 159 Elm, Newark. (7)
 Robinson, William D., 12 S. Grove, East Orange.
 Roden, Hugh P., 345 Washington, Newark. (7)
 Roeber, William J., 104 Spruce, Newark. (7)
 Rogers, Benjamin H., 213 B'dway, Paterson. (16)
 Rogers, Edward B., Collingswood. (4)
 Rogers, George A., 1 Wallace, Newark. (7)
 Rogers, Richard R., Jr., 610 Perry, Trenton, (11)
 Rogers, Richard R., 110 E. Hanover, Trenton. (11)
 Rogers, Robert H., 64 S. 10th, Newark. (7)
 Rose, Horace L., 842 Federal St., Camden. (4)
 Rose, William Walter, 2 Myrtle Ave., Newark.
 Rosenkrans, James H., 826 Hudson St., Hoboken.
 Rosensohn, William, 310 Dodd, East Orange. (7)
 Ross, Alexander S., 608 Benson St., Camden. (4)
 Rostow, Clarence, 655 High, Newark. (7)
 Ruch, Valentine, Jr., Englewood. (2)
 Rue, Henry B., 931 Bloomfield St., Hoboken. (9)
 Runyon, Mefford, 110 Irvington ave., So. Orange.
 Russell, Anthony B., 54 William, East Orange.
 Ryan, John N., 136 Jefferson, Passaic. (16)
 Ryerson, John G., Boonton. (14)
 Sandt, Frank R., 466 Park ave., Paterson. (16)
 Sandy, Wm. C., P. O. Box 258, Trenton. (11)
 Sauer, Ferdinand W., 314 Varick, Jersey City. (9)
 Saulsberry, Charles E., Mays Landing. (1)
 Saunders, Orris W., 1813 S. 6th St., Camden. (4)
 Scammell, Frank G., 413 E. State, Trenton. (11)
 Schaufler, William Gray, Lakewood. (15)
 Schellenger, Ed. A. Y., 429 Cooper, Camden. (4)
 Scheppach, Harry A., 164 Bergen St., Newark. (7)
 Schlemm, Richard, 111 Palisade ave., T. of U. (9)
 Schlichter, Chas. H., 1053 Elizabeth av., Elizabeth.
 Schneider, Charles A., 44 Hillside Pl., Newark.
 Schoening, Gustave A., 223 Perry, Trenton. (11)
 Schopfer, William A., 43 Read, Newark. (7)
 Schureman, Charles A., 22 Hill, Newark. (7)
 Schwarz, Emanuel, 561 High, Newark. (7)
 Scott, Elmer A., Asbury Park. (13)
 Scott, George, 1109 Pacific ave., Atlantic City. (1)
 Scribner, Charles H., 82 Ward, Paterson. (16)
 Sealy, Edward, 369 Washington, Newark.
 Seeds, John B., 495 Centre, Trenton. (11)
 Seibert, Edgar C., 436 Main, Orange. (7)
 Seidler, William F., 21 Ferry, Newark. (7)
 Seidman, Marcus, 580 High, Newark. (7)
 Sell, Frederick W., Rahway. (20)
 Senseman, Theo., 101 St. Charles pl., Atlantic City
 Sewall, Millard F., Bridgeton. (6)
 Seward, Frederick H., Madison. (14)
 Sexsmith, Geo. H., 719 Ave. C, Bayonne. (9)
 Shailer, Sumner, 271 Clinton Ave., Newark. (7)
 Shangle, Milton A., 1143 E. Jersey, Elizabeth.
 Shannon, Patrick A., 133 Albany, N. Bruns. (12)
 Sharp, Ezra B., 412 Broadway, Camden. (4)
 Sharp, Jennie S., 504 Broadway. (4)
 Sharpe, Edward S., 30 No. Georgia av., Atlantic C
 Shaul, Frederick G., 70 Washington, Bloomfield.
 Shaw, Harry E., Long Branch. (13)
 Shaw, Jos. B., 119 S. Warren, Trenton. (11)
 Sheiner, L. H., 441 W. 13th St., West New York.
 Sheppard, Frank R., Millville. (6)
 Shepherd, Irenaeus M., 188 S. Broad, Tren. (11)
 Sherman, Elbert S., 191 Summer Ave., Newark.
 Sherk, Henry H., 2647 Westfield Ave., Camden.
 Shera, George W., 489 Jersey ave., Jer. City. (9)
 Sherron, Clifford M., Salem. (17)

- Shick, William F., 31 Park, Newark. (7)
 Shimer, Arthur B., 606 Pacific ave., Atlantic City.
 Shipp, William H., Bordentown. (3)
 Shirrefs, Russell A., 1158 E. Jersey, Elizabeth.
 Sickenberger, Ernest F., Rutherford. (2)
 Silk, Charles I., 422 State, Perth Amboy. (12)
 Silvers, Elihu B., 55 Seminary ave., Rahway. (20)
 Simmons, M. Herbert, 225 Cleveland, Orange. (7)
 Simmons, Wesley Grant, Swedesboro. (8)
 Simpson, Maxwell S., Middle Valley. (14)
 Sinclair, Robert R., Westfield. (20)
 Slack, Clarence M., 50 Livingston av., N. B. (12)
 Slaughter, J. M., Wildwood. (5)
 Slocum, Harry B., Long Branch. (13)
 Small, Alexander H., Riverside. (3)
 Smalley, Mahlon C., Gladstone. (18)
 Smith, Anna L., 50 N. Fullerton Ave., Montclair.
 Smith, Arthur L., 62 Bayard, New Bruns. (12)
 Smith, Charles B., Washington. (21)
 Smith, D. Winans, 201 Walnut, Newark. (7)
 Smith, Houghton, 1007 Division, Trenton. ((1)
 Smith, John F., Salem. (17)
 Smith, J. Anson, Blackwood. (4)
 Smith, Leonard H., 6 N. Munn Ave., E. Orange.
 Smith, Thomas J., Bridgeton. (6)
 Snyder, Sharps M., Greenwich. (6)
 Somers, M. LeRoy, 1910 Pacific av., Atlantic City.
 Sommers, Geo. N. J., 229 Perry, Trenton. (11)
 Souder, Lewis R., 19 Victoria ave., Atlantic City.
 Sparks, U. S. Grant, Mantua. (8)
 Spence, Henry, 681 Bergen ave., Jersey City. (9)
 Spencer, Ira T., Main, Woodbridge. (12)
 Sprague, Edward W., 108 Washington St., New'k.
 Sprenger, William A., 518 Broadway, Camden. (4)
 Sproul, Obadiah H., Flemington. (10)
 Squier, Manning F., 234 Harrison av., Har. (9)
 Staehlin, Edward, 493 High, Newark. (7)
 Stage, Jacob S., 95 Jefferson, Newark. (7)
 Stahl, Alfred, 550 Bergen St., Newark. (7)
 Stanwood, Robert G., 117 N. 6th St., Newark. (7)
 Steadman, Eban T., 635 Wash'gton St., Hoboken.
 Steadman, Walter, 706 Bloomfield St., Hoboken.
 Steiner, Edwin, 1 Sterling, Newark. (7)
 Stellwagen, Fred B., 28 Clifton ter., Weehawken.
 Stephens, David, Addison, N. Y. (12)
 Stern, Arthur, 218 E. Jersey, Elizabeth. (20)
 Stevens, Pliney F., 853 Ave. C, Bayonne. (9)
 Stevenson, John R., Haddonfield. (4)
 Stevenson, Wm. D., 40 S. Clinton ave., Trenton.
 Stewart, James M., 181 Van Houten, Paterson.
 Stewart, W. Blair, 43 So. N. Car. av., Atlantic City
 Stilwagon, Philip E., Bridgeport. (8)
 Stillwell, Aaron L., Somerville. (18)
 Stites, Ellsmore, Bridgeton. (6)
 Stites, Joseph A., Springfield. (20)
 Stoddart, Francis S. J., Rydal, Pa. (3)
 Stokes, Joseph, Moorestown. (3)
 Storm, Walter, Hope (21)
 Stout, Daniel, Berlin. (4)
 Stout, Harry A., Wenonah. (8)
 Stanger, Samuel F., Harrisonville. (8)
 Strasser, August A., 115 Beach St., Arlington.
 Stratton, William M., Woodbury. (8)
 Strock, Daniel, 818 Federal St., Camden. (4)
 Stroud, Frank G., Moorestown. (3)
 St. John, David, Hackensack. (2)
 Stinson, Richard, 158 Broadway, Paterson. (16)
 Sullivan, John J., 51 Passaic ave., Passaic. (16)
 Sullivan, Michael J., Englewood. (2)
 Sulouff, S. Henry, 10 W. Hamilton Pl., J. City (9)
 Summerill, John Morris, Pennsgrove. (17)
 Surnamer, Isaac, 89 Bridge, Paterson. (16)
 Sutphen, Carl E., 181 Roseville Ave., Newark. (7)
 Sutphen, Edward B., 907 Broad, Newark. (7)
 Sutphen, Theron Y., 907 Broad, Newark. (7)
 Sutton, Edward, German Valley. (14)
 Suydam, John L., Jamesburg. (12)
 Swayze, Alvah A., Hackensack. (2)
 Swiney, Merrill A., 341 Avenue C, Bayonne. (9)
 Symmes, Henry C., Cranbury, (12)
 Synnott, Martin J., 34 S. Fullerton Ave., Montclair
 Taggart, T. D., 25 So. Ill. ave., Atlantic City. (1)
 Tarbell, Henry A., 28½ Thomas, Newark. (7)
 Tattersall, Joseph, 1042 Main, Paterson. (16)
 Taylor, H. Genet, 305 Cooper St., Camden. (4)
 Taylor, John, 1211 Grand ave., Asbury Park. (13)
 Taylor, John L., Boonton. (14)
 Taylor, Sewell O. B., Millstone. (18)
 Taylor, Walter A., P. O. Box 258, Trenton. (11)
 Teeter, Charles E., 418 Orange, Newark. (7)
 Teimer, Theodor, 450 High, Newark. (7)
 Temple, Arthur H., 164 Jefferson, Passaic. (16)
 TenEyck, John D., Franklin Park. (18)
 Terhune, Percy H., 162 Gregory av., Passaic. (16)
 Terriberry, George W., 146 B'dway, Paterson.
 Thompson, Charles H., Belmar. (13)
 Thompson, John R. C., Bridgeton. (6)
 Thompson, Otto C., Cassville. (15)
 Titus, Charles W., 487 Orange, Newark. (7)
 Titus, Geo. E., Hightown. (11)
 Todd, Francis H., 218 Broadway, Paterson. (16)
 Tomlin, H. H., Wildwood. (5)
 Tomlinson, Joseph, Bridgeton. (6)
 Tomlinson, Roland D., Plainfield. (20)
 Tomlinson, Thomas H., Plainfield. (20)
 Towle, Henry A., 16 Halsey, Newark. (7)
 Townsend, Mary E., 13 So. Pa. av., Atlantic City.
 Townsend, Theodore E., Westwood. (2)
 Tracy, George T., Beverly. (3)
 Trainor, James H., 131 Elm, Newark. (7)
 Traub, Paul, Bordentown. (3)
 Treganowan, Ambrose, Main, South Amboy. (12)
 Tuers, George E., 12 Church, Paterson. (16)
 Tunison, G. Orlando, Oxford. (21)
 Turner, William F., 562 Jefferson ave., Elizabeth.
 Tutschulte, Ernest, 149 Polk, Newark. (7)
 Twinch, Sidney A., 598 Broad, Newark. (7)
 Tyrrell, George W., 222 State, Perth Amboy. (12)
 Underwood, Charles F., 259 Mt. Prospect Ave., N.
 Utter, Sylvester, 12 Church, Paterson. (16)
 Vail, Herbert B., 282 Washington ave., Belleville.
 Vail, James Lindley, Cranford. (20)
 Van Alstyne, William B., Westfield. (20)
 Vanderbeek, Andrew B., 174 B'dway, Paterson.
 Van Duyn, Sarah E., 247 Belleville Ave., Newark.
 Van Duyn, William B., 133 Perry St., Trenton. (11)
 Van Dyke, Benj. S., 101 Eaton Pl., East Orange.
 Van Dyke, Joseph S., Palisades Park. (2)
 Van Ess, John, 53 Bridge, Paterson. (16)
 Van Gaasbeek, Harvey D., Sussex. (19)
 Van Horn, Alfred F., Plainfield. (20)
 Van Horne, Byron G., Englewood. (2)
 Van Horne, Carrie H., Englewood. (2)
 Van Noort, Frank J., 393 Main, Paterson. (16)
 Van Riper, A. Ward, 207 Main av., Passaic. (16)
 Van Riper, Cornelius, 207 Main av., Passaic. (16)
 Van Sciver, John E. L., 445 S. 4th St., Camden.
 Van Syckle, Alva C., Hackettstown. (21)
 Van Wagenen, George A., 101 N. 6th, Newark.
 Vaughan, Harry, Morristown. (14)
 Vigna, Fortunato, 35 Ward, Paterson. (16)
 Vinton, Maria M., 15 Halsted pl., East Orange.
 Voelbel, Benj. H., So. Orange ave., Vailsburgh.
 Voorhees, E. R., M. D. C., Somerville. (18)
 Voorhees, Nathaniel W., 297 N. Broad, Elizabeth.
 Voorhees, Shepard, Newton. (19)

- Von Deestin, H. T., 619 Garden St., Hoboken. (9)
 Vreeland, Clarence L., 174 Ocean ave., J. C. (9)
 Vreeland, George W., 127 Hamburg av., Paterson.
 Vreeland, Hamilton, 78 Summit ave., Jersey City.
 Vreeland, William N., 2 Park, Jersey City. (9)
 Vroom, William L., Ridgewood. (2)
- Waddington, Benj. A., Salem. (17)
 Wade, John W., Millville. (6)
 Wagner, Otto, 1051 Elizabeth ave., Elizabeth. (20)
 Wainright, J. M. B., 315 Varick St., Jersey City.
 Waite, George N., 569 High, Newark. (7)
 Walling, Wm. H., 1209 Pacific ave., Atlantic City.
 Wallace, Henry, 201 Ridgewood ave., Glen Ridge.
 Wallhauser, Henry J. F., 47 New, Newark. (7)
 Walschied, A. John, 309 Fulton, T. of Union. (9)
 Walters, John, Wharton. (14)
 Ware, James W., 977 Avenue C, Bayonne. (9)
 Ward, Albert H., 404 Totowa ave., Paterson. (16)
 Ward, Alfred W., Closter. (2)
 Ward, Edwin M., 17 Park pl., Bloomfield. (7)
 Ward, Gertrude P., 41 Park pl., Bloomfield. (7)
 Ward, John W., P. O. Box 258, Trenton. (11)
 Ward, William J., 438 Warren, Newark. (7)
 Warman, David, 239 Chestnut ave., Trenton. (11)
 Warneke, Frank, 310 First ave., Elizabeth. (20)
 Warner, William B., Red Bank. (13)
 Warner, W. H. Alonzo, 400 Central Ave., E. Or.
 Warren, George L., 77 Houston, Newark. (7)
 Warren, Wm. H., 863 Mt. Prospect ave., Newark.
 Washington, Walter S., 8 Washington Pl., New'k.
 Waters, Chas. H., 50 W. Hanover, Trenton. (11)
 Watson, W. Perry, 116 Gifford Ave., Jersey City.
 Way, Eugene, Dennisville. (5)
 Way, Julius, Cape May Court House. (5)
 Webster, D. King, Cape May Court House. (4)
 Webner, Frederick C., 96 Clinton Ave., Newark.
 Webster, J. Bart., 132 S. Maryland av., Atlantic C.
 Weeks, David F., 326 W. State, Trenton. (11)
 Weeks, Henry M., Skillman. (18)
 Weil, Edwin M., 225 5th St., Jersey City. (9)
 Weiss, Louis, 227 S. Orange Ave., Newark. (7)
 Welshman, Geo. O., 150 Summer av., Newark. (7)
 Welch, George T., Passaic. (13)
 Welch, Joseph T., Long Branch. (13)
 Wells, Jos. M., 922 Edgewood ave., Trenton. (11)
 West, Edgar L., 274 Hamilton ave., Trenton. (11)
 West, Nevin B., Egg Harbor City.
 Westcott, William A., Berlin. (4)
 Wheeler, Harry S., Whippany. (14)
 Wherry, Elmer G., 325 Clinton Ave., Newark. (7)
 White, Frank H., Hackensack.
 White, George D., 459 Fairmount ave., J. City. (9)
 White, J. Orlando, 329 Cooper St., Camden. (4)
 White, J. T., 1198 Haddon Ave., Camden. (4)
 White, Wm. H., 451 Franklyn, Bloomfield. (7)
 Whitehead, Rufus B., 310 First ave., Elizabeth.
 Whitehorne, Henry B., Grove ave., Verona. (7)
 Whitmore, Walter S., Red Bank. (13)
 Wickman, Albert, 325 Washington, Newark. (7)
 Widmer, Henry R., 516 Clinton Ave., Newark.
 Wigg, Cuthbert, Boonton. (14)
 Wilbur, George F., Asbury Park. (13)
 Wilbur, Wm. L., "Aleda," Hanover st., Tren. (11)
 Wild, Frederick A., Bound Brook. (18)
 Wilkinson, George W. V., Morristown. (14)
 Wills, Joseph H., 229 N. 3d St., Camden. (4)
 Wilson, Charles W., Vineland. (6)
 Wilson, Howard A., Woodbury. (8)
 Wikoff, James Holmes, Princeton. (11)
 Wilson, John G., 186 High, Perth Amboy. (12)
 Wilson, Norton L., 410 Westminster av., Elizabeth
 Wilson, Stacy M., Bridgeton. (6)
 Wilson, W. Stockton, 96 Montclair Ave., Newark.
 Wilkinson, George H., Moorestown. (3)
 Williams, Charles M., Washington. (21)
 Winans, Joseph C., St. Michael's Hospital, New'k.
 Wingender, Wendell P., 800 Market St., Camden.
 Wintersteen, J. Boone, Moorestown. (3)
 Woelfle, Henry E., 75 Bowers St., Jersey City. (9)
 Wolfe, William J., Chatham. (14)
 Wolff, Ferdinand C., 1136 Garden St., Hoboken.
 Wolfson, Joseph, 95 Mercer St., Jersey City. (9)
 Wood, Orran A., Magnolia. (4)
 Woodruff, Stanley R., 22 W. 22d St., Bayonne.
 Woods, A. Lincoln, Main, South River. (12)
 Woolbert, R., 26 N. Del. ave., Atlantic City. (1)
 Woolley, Scudder J., Long Branch. (13)
 Woolston, Elijah B., Marlton. (4)
 Worl, Edward E., 271 High, Newark. (7)
 Wormley, James A., 83 New, Newark. (7)
 Wort, Fred. J., Jr., 102 Clinton ave., Newark. (7)
 Wrightson, James T., 25 Walnut, Newark. (7)
 Wyckoff, J. Talmage, Leonia. (2)
 Wyler, Max., Fort Lee. (2)
- Yard, Pearson W., 727 S. Broad, Trenton. (11)
 Yates, John S., 79 Bridge, Paterson. (16)
 Young, Charles, 23 E. Kinney, Newark. (7)
 Young, Joseph C., 964 Broad, Newark. (7)
 Young, Peter C., Ringoes. (10)
- Zabriskie, Samuel J., Westwood. (2)
 Zeglio, Peter J., North Plainfield. (18)

101

SUPPLEMENT TO THE JOURNAL OF THE Medical Society of New Jersey.

Vol. IV., No. 2.

Orange, N. J., August, 1907.

SUBSCRIPTION. \$2 00 PER YEAR

OFFICIAL TRANSACTIONS.

Minutes of the Proceedings of the Medical
Society of New Jersey at its 141st
Annual Meeting, held at the Hotel
Scarboro, Long Branch,
June 25, 26, 27, 1907.

Tuesday Morning, June 25th.
11:55 A. M.

MEETING OF THE HOUSE OF DELEGATES.

The meeting was called to order by the President, Dr. Alexander Marcy, of River-ton.

Dr. Marcy: Gentlemen, it is long past the time to begin, although the number of delegates registered does not reach that required; but in order to transact the business before us, we must begin. Therefore, I declare the one hundredth and forty-first meeting of the Medical Society of the State of New Jersey open.

The first business before the Society is the report of the Committee on Credentials, of which Dr. Daniel Strock is Chairman.

Dr. Daniel Strock, Camden: The Committee on Credentials report that nineteen delegates have registered, representing ten counties.

The Committee also report that all the counties, with the exception of two, made reports to the Secretary and Treasurer, in accordance with the provisions of the by-laws, one month previous to the meeting of this Society.

One of the two counties above mentioned, Atlantic, has subsequently met all the requirements of the by-laws; but the other, Hunterdon, has only paid six dollars to the Treasurer.

The Committee considers that the county societies of Atlantic and Hunterdon are delinquent and should be debarred from participating in the business of this meeting, unless relieved by action of the House of Delegates.

In the case of Atlantic County, the Committee recommend that this Society take immediate action and remove the disability.

Respectfully submitted,

(Signed) DANIEL STROCK, *Chairman.*

Dr. Marcy: Gentlemen, you have heard the report of the Chairman of the Committee on Credentials. What is your pleasure?

Moved and seconded that the report be received.

Dr. William J. Chandler: This report brings up a question which has been before the Society several times; and the Committee on Credentials declare Atlantic County delinquent, although it has several days ago satisfied all the requirements. I want to read the by-law on the subject and have a decision by the Society on that point.

"CHAPTER XII—ASSESSMENTS AND EXPENDITURES.

"SECTION 1. An assessment of two dollars per capita on the membership of the component societies is hereby made the annual dues of this Society, unless otherwise ordered by the Society. At least one month before the annual meeting of the Medical Society of New Jersey, the Treasurer of each component Society shall forward to the Treasurer of this Society the amount of its assessment with a list of the members who have paid their assessments and are otherwise in good standing.

"SECTION 2. Any component Society which fails to pay its assessments or to make the reports as required in this constitution and by-laws shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society (unless the disability be removed by the House of Delegates) until all requirements have been satisfied."

It has hitherto been held by this Society that if any component Society fails to pay its assessments, or if the Secretary fails to send in the four reports, it was suspended until the Society met; but that is not what the by-law says. It says that it is suspended until all the requirements have been satisfied. These had been satisfied in the case of Atlantic County before the Society met. They were discharged last week, and it then ceased to be suspended. If it had not paid its dues or made out its report, it would be the function of the House of Delegates to remove the suspension or not, as it chose.

If the Society had met two weeks ago, it would then have been in the power of the House of Delegates to remove the disability; but as soon as the assessments are paid and the four reports handed in, the by-law says that the requirements are satisfied. The interpretation is that the suspension then ceases. It is necessary that the Committee on Credentials, who have always ruled in accordance with a different interpretation, should receive instructions as to how to rule in the future.

Dr. Archibald Mercer, Newark, Treasurer: There is another by-law that says that all county societies shall pay their dues at least one month prior to the annual meeting. According to that by-law, the Committee on Credentials has declared both Atlantic and Hunterdon counties delinquent because they did fail to pay at the prescribed time.

Dr. Chandler: The by-law to which Dr. Mercer refers is the one which has just been read.

Dr. C. R. P. Fisher, Bound Brook: I think it would be in the power of the House of Delegates to remove that disability at this time, since Atlantic County has paid up. To bring the question before the house, I move that it be removed from suspension.

Motion seconded.

Dr. Marcy: Any remarks on the question?

Dr. Chandler: The question is not whether the House of Delegates has the power to remove the disability, but whether there is any disability existing at the present time in regard to Atlantic County. The Committee on Credentials rule that the disability exists. The by-law seems to allow the inference that the disability has already ceased and that there is nothing for the House of Delegates to remove.

Dr. Charles J. Kipp, Newark: I would amend it by moving that those members who have paid their dues be exempted from suspension.

Amendment seconded.

Dr. Mercer: Before the Society votes on it, I think that it would be necessary to know what members have paid. The Treasurer has received six dollars from six members, which is one dollar apiece. I have no evidence that they have paid any other money, and those who have paid but one dollar are still delinquent.

Dr. Marcy: The amendment will have to be ruled out of order.

Dr. Kipp: To the personal knowledge of Dr. Sproul, six men have paid their dues. I move that they be exempted.

Dr. Marcy: The Treasurer cannot accept Dr. Sproul's statement.

Dr. Mercer: It is not that I have any objection to accepting the statement of Dr. Sproul, but that it seems to me to be a loose way of doing business. We do not want to establish such a precedent.

Dr. Chandler: I should like to reënforce Dr. Mercer's statement by saying that no list of the members who paid the six dollars has been forwarded to the Secretary as required in the by-law. Hunterdon County has failed to pay its assessments and to send in the list of those who have paid. The assessment of this Society is two dollars for each member. Six dollars covers only three members' assessments. What three members have paid that amount we do not know. Hunterdon County is still delinquent; but Atlantic County, according to the proper interpretation of the by-laws, is not delinquent at the present time. For that reason, I would move to declare the first motion out of order.

Dr. Fisher: The President has ruled that the amendment is out of order.

Dr. Marcy: The question before the house is the original motion of Dr. Fisher.

Dr. Chandler: I move that Dr. Fisher's motion be declared out of order.

Motion seconded.

Dr. Kipp: I ask for the decision of the Chair on that point.

Dr. W. B. Johnson, Paterson: I rise to a point of order. A motion to declare a motion out of order is not a proper motion.

Dr. Marcy: The motion before the house is that the disability referring to Atlantic County should be removed.

Dr. O. H. Sproul, Flemington: Atlantic County is not delinquent. They have fulfilled the requirements.

Dr. Mercer: The money should have been paid in a month ago, but it came just in time for them to squeeze in; and it is proper for the house to move that they shall not be allowed to come in.

Dr. D. C. English, New Brunswick: It is a very important matter that we are deciding. We are establishing a precedent. There are two views to take. One is this: that they are delinquent until the House of Delegates removes the disability, as stated in the parenthesis. The other part of the by-law states that they shall be delinquent until they have complied with the requirements and paid over the money. They have done that, and consequently they cease to be delinquent. I hope this is the correct view; yet, let me suggest for your consideration,

is not that establishing a bad precedent? May not others fail to send in reports a month in advance and send them in two or three days before the annual meeting, thus making it utterly impossible for the Treasurer to get his report ready to present in time?

Motion put to a vote and carried.

Dr. Marcy: The disability of Atlantic County has been removed.

Dr. Chandler: Would it be proper now to bring up the question as to when the suspension of a Society ceases? Atlantic County can undoubtedly be excused by the House of Delegates at any time when it is in session; but the question is whether the county was delinquent just now when it was excused, or, in other words, whether it required any action of the House of Delegates to excuse it. The language of the by-law speaks of the assessment as being per capita, and then says:

"At least one month before the annual meeting of the Medical Society of New Jersey, the Treasurer of each component Society shall forward to the Treasurer of this Society the amount of its assessment with a list of the members who have paid their assessments and are otherwise in good standing."

This is one part of the chapter. The next part is the one that I have read already: when a Society fails to pay one month before the annual meeting, it is delinquent. How soon, then, can that delinquency be removed? We have always held that it could not be removed after that time, even though they paid their dues and sent in their report, until this Society met and acted on the disability. It was the intention of the framers of this article that it should have this meaning; but the by-law has been examined by a Justice of the Supreme Court of this state, and he decides that there is only one interpretation that can be put upon it, viz., that as soon as they do pay their assessments and send in their reports their suspension ceases. We should give due consideration to an opinion from such a source and seek to establish the correct interpretation of our by-law, so that it may not be misunderstood in the future.

Dr. D. C. English: I move that the matter be referred to the Board of Trustees.

Motion seconded and carried.

Dr. Alexander McAlister, Camden: There is a vacancy existing in Camden County's delegation, and the members request that Dr. P. M. Mecray be appointed to fill it.

Dr. Marcy: I announce the appointment

of Dr. Paul M. Mecray as an alternate delegate from Camden County.

Dr. Fisher: There is a vacancy in the delegation from Somerset County, and I request that Dr. Josiah Meigh, of Bernardsville, be appointed.

Dr. Marcy: Dr. Meigh is appointed alternate delegate from Somerset County.

The next business in order is the reading of the minutes of the last annual meeting.

Dr. Chandler began the reading of the minutes.

It was moved and seconded that the minutes as printed in the JOURNAL be approved. Carried.

Dr. Paul M. Mecray, Chairman of the Committee on Arrangements, read the report of that committee, as follows:

"In the latter part of May, the President of the Society and the Chairman of your Committee visited the new Cape May Hotel. It was then evident that the hotel would not be in readiness to entertain the Society. About the same time, the following letter was received from the proprietor of the hotel: 'Dear Doctor: It is with much regret that, owing to the severe weather of this past spring and labor troubles combined, we will be delayed in having the hotel turned over by the builders in the shape and manner that we should like to have it, in order to entertain the Medical Society of New Jersey at their coming convention. While we greatly feel the loss of this convention, we should rather the Society would have their first impression of our new hotel the most lasting, and we sincerely hope that you will accept our regrets and try to be with us in 1908.'

"With personal regards to yourself, and our sincere thanks to the doctors for their courtesy in this matter, we remain,

"Yours very truly,

"(Signed) JAS. P. DOYLE, Manager."

"The Trustees thereupon decided to hold the session at the Scarborough, Long Branch.

"The President added Drs. Forman, Warner, Shaw, Woolley and Bennett to the Committee of Arrangements. To these gentlemen, under the chairmanship of Dr. Bennett, credit for the local arrangement is due.

"They have provided a drive for the ladies for Wednesday afternoon, (carriages will leave the hotel at 3 o'clock), and a dinner for the Society and its guests at Pleasure Bay in the evening.

"Fifteen (15) exhibitors, contributing \$255 are expected to be present. Certain exhibitors who had engaged space at Cape May before the meeting of the American Medical Association decided, after that meeting, that they would reach the same doctors here that had already seen their exhibits at Atlantic City, and therefore gave up their spaces. Many others gave the same reason for not coming.

"(Signed) PAUL M. MECRAY, Chairman."

Moved and seconded that the report of the Committee on Arrangements be accepted. Carried.

Dr. Marcy: The next business is the election of Permanent Delegates. Nominations are in order.

Dr. Chandler: I move that the election be deferred. There are some candidates to be presented, but their credentials have not been examined.

Motion seconded and carried.

Dr. Marcy: The President has no committees to announce. The next business is the report of the Committee on Honorary Membership.

Dr. H. Genet Taylor, Camden, Chairman of the Committee on Honorary Membership, read the report of that committee, as follows:

To the Medical Society of New Jersey:

The Committee on Honorary Membership would respectfully report that the name of Dr. Albert Vander Veer, of Albany, N. Y., was proposed at the last annual meeting of the Society, for Honorary Membership and referred to this Committee.

Dr. Albert Vander Veer was graduated in 1862 at the National Medical College—now, Medical Department, George Washington University, Washington, D. C., with the Honorary Degree of M. D.; also received the Degree of M. D. at Albany Medical College, 1869; also the Degree of Ph. D. in 1882; also the Degree of LL. D. at Union and Hamilton College and George Washington University in 1904; was commissioned as Surgeon of the 66th New York Vols. and served during the Civil War; was Professor of General and Special Anatomy, 1869-82—Didactic, Clinical, Abdominal Surgery, 1882-1904, Dean of Albany Medical College, 1896-1905, and Surgeon-in-chief Albany Hospital; was President of the Medical Society of State of New York, and of the Surgical Association; has been member of the Board of Regents of the State of New York since 1895, a writer on Uterine Surgery and related subjects, and has contributed numerous other professional papers in medical society reports.

In consideration of the distinguished medical career during his life-work in the medical profession, as embraced in this report, your Committee take pleasure in recommending Dr. Albert Vander Veer as an Honorary Member of this Society.

H. GENET TAYLOR,
ELIAS J. MARSH,
LUTHER M. HALSEY,
Committee.

June 25, 1907.

It was moved and seconded that the report be received and its recommendations adopted. Carried.

It was moved and seconded that the Secretary be asked to cast a ballot for the election of Dr. Vander Veer, of Albany, N. Y., as an honorary member of the Society. This was done, and he was declared elected.

Dr. E. F. Denner, Paterson: I would request that, owing to the absence of Dr. Henry Kip, who was elected an annual dele-

gate, Dr. Frank B. Keller, of Passaic, be appointed in his place.

Dr. Marcy: Dr. Frank B. Keller is appointed.

There was no report of the Committee on Business, and no new business requiring early attention.

The report of the Committee on Program was read by Dr. Chandler, the Chairman of that committee.

REPORT OF COMMITTEE ON PROGRAM.

The Committee on Program desires to acknowledge its indebtedness to the Committee on Scientific Work for their valuable assistance in collecting the papers for this meeting. That committee is in a position early to ascertain from the writers of papers their preferences as to position on the program and the length of time they will consume in reading. They have accordingly sent in their report with such an excellent arrangement of the papers that but very little change was found necessary. If the length of the discussions and the presence or absence of the readers of papers could be equally prognosticated, the arrangement of the program would compare favorably with a railroad time-table in accuracy.

We have arranged to occupy the time allotted for the scientific sessions with the papers presented in the program. Several applications for position were made after the program was in press. An opportunity, however, may be given for these applicants to present their papers if there is any default by the scheduled readers or if there should for any reason be a surplus of time.

At our last meeting the Society authorized the discontinuance of the general distribution of the booklet programs, and in place thereof recommended the publication of the program in the JOURNAL. It has been so done this year. Several of our members have forgotten this change or have never noticed its recommendation. They have wondered why they did not receive the program and have written to know if it was printed. This is sad evidence that some of our members very carelessly read the "minutes" and are equally hasty in their perusal of the JOURNAL.

The expense to the Society of this plan is very much less. The ordinary cost of the programs, with wrapping, addressing and postage is about \$65.00. This year the cost of printing is \$30.75, the cost of addressing and mailing \$4.00, thus showing a saving of about fifty per cent. We mailed a limited number of the booklets to delegates, committeemen, secretaries of state societies, and to the guests of this Society. The continuance of this plan for another year will not again work the hardship of "hope deferred," and will probably stimulate a more careful perusal of the pages of our JOURNAL.

Respectfully submitted,

ALEXANDER MCALISTER,
FRED. F. C. DEMAREST,
WM. J. CHANDLER, Chairman.

It was moved and seconded that the report be accepted. Carried.

The report of the Committee on Scientific Work was read by the Chairman of that committee, Dr. N. L. Wilson, Elizabeth.

REPORT OF THE SCIENTIFIC COMMITTEE.**Dr. Norton L. Wilson, Chairman.***Mr. President and Members of the Medical Society of New Jersey:*

Your Committee on Scientific Work desire to take this occasion to thank the members who so promptly responded to the invitation to read papers. We have secured thirteen papers on various subjects with a symposium on diseases of the gall bladder, which will have five fifteen-minute papers, also a symposium on the eruptive diseases, containing four fifteen-minute papers, together with the address of the President and Third Vice-President and the Orations on Surgery and Medicine, making a total of twenty-four papers. Of the twenty-one counties in this Society we regret to say only eleven have reported to this committee. We would suggest that these reports be printed in full in the JOURNAL, as many interesting cases and much that interests the Society is there reported.

A full and complete report should be received from each component society. It is a record of their work. We would suggest that a uniform printed blank be sent to each reporter, asking him to fill it out and return to the Chairman of the Scientific Committee.

Abstracts of the eleven county reports are herewith appended.

Atlantic County sent in a report to the Chairman of the Standing Committee after the first of June and is not here abstracted.

Hudson County had a report in the JOURNAL and supposed she had done her full duty.

Bergen County. This Society is evidently enjoying prosperity. Several interesting papers have been read. In April, May and June of last year Scarlet Fever prevailed to a considerable extent in the eastern part of the county. There were many cases of Pertussis, Measles and Diphtheria throughout the county. The winter months were notable for much illness of a general nature. Cases of Grippe were numerous, and Pneumonia of a mild type prevailed, especially in children.

Burlington County. This Society is growing in membership, attendance and in general interest. Dr. I. D. Young, of Bordentown, died at the age of eighty. A few reform measures have been adopted, notably those pertaining to contract practice and life insurance. On January 9th they held their seventy-seventh annual meeting at Mount Holly. The wives of the Mount Holly members gave a light tea to the wives of the out of town physicians from 4 to 6.30. After the business of the meeting a banquet was served at which the ladies and several prominent gentlemen were guests. On February 18th Dr. McCormack visited them. The audience was not large but was an appreciative one. A committee was appointed to formulate plans for post-graduate instruction. The usual amount of Grippe, Whooping Cough and a slight epidemic of Diphtheria, together with a few cases of Typhoid and an increased number of criminal abortions were reported. Several interesting cases were reported.

Camden County. This Society closed its sixtieth year with seventy-nine active members. During the year six new members were added and two removed by death. Drs. O. B. Gross and Charles Wetton having died during the year. The Society endorsed the action of the Medical Council of the A. M. A. and pledged its support and aid to secure the passage of a bill to provide for

a department of public health, with representation in the Cabinet. The following sections were appointed for the year: Sanitary Science, Obstetrics, Pathology, Microscopy, Practice of Medicine, Surgery Gynecology. They all held interesting meetings at which good papers were read and discussed. Dr. McCormack had a large and appreciative audience, both in the afternoon and evening. They adopted his suggestion regarding a post-graduate course, which has been launched and promises success. Scarlet Fever and Diphtheria are more prevalent than in previous years. La Grippe was of rather mild type, but in some instances was followed by Pneumonia. An interesting account by Dr. Braddock, who has been in the Siamese Kingdom, is given in the report.

Essex County. This Society has done good work the past year. Four meetings have been held. Dr. McCormack was the speaker at the meeting held February 1st. Several eminent physicians have read papers before this Society this past year. Dr. C. R. Pettinger, Dr. D. M. Skinner and Dr. M. T. Gaffney were removed by death. Fourteen new members were elected. They adopted the broad policy of admitting to membership any legally qualified physician of moral and professional reputation. They adopted a resolution opposing the Osteopathic Bill.

Gloucester County had five regular meetings during the year, with several very interesting papers. They entertained Dr. McCormack on February 20th, who spoke to the profession in the afternoon and at a mass-meeting in the evening, before an appreciative audience. A committee was appointed to formulate plans to carry into effect his recommendations. La Grippe, Pneumonia, Pertussis, Tonsillitis, Parotitis, Measles, Scarletina and Varicella have been prevalent during the year, but there have been no severe epidemics.

Mercer County. At the July meeting they considered the position of Railroad Surgeon as being equivalent to contract practice, but amended their by-laws allowing him to do contract work. At the December meeting they approved the \$5 fee as the minimum in insurance examinations. They have had interesting and instructive papers and their social relations were strengthened by a banquet. Dr. Elmer Rogers died during the year. Dr. McCormack's visit was a profitable one. Resolutions were adopted condemning Senate Bill 469.

Ocean County. The Reporter regrets that the members are so widely scattered that it is difficult to get them together. Very little literary or scientific work is accomplished. The regular meetings were held. The membership remains the same. Dr. McCormack did not visit them because they could not get a large enough audience.

Passaic County has held eight regular meetings during the past year at which a number of interesting papers have been read. Their Legislative Committee secured their Senator and entire Assembly delegation to oppose the Osteopathic Bill. They seem to be particularly sensitive regarding the question of life insurance fees and by unanimous vote requested the Secretary to consign all such communications to the wastebasket. The membership shows a net gain of four, six having been elected and two dropped. Total membership ninety. In place of the May meeting they held a dinner, which was in every way a success.

Salem County held three meetings during the year, at which time interesting papers were read.

Dr. Marvel, their Councilor, visited them on February 6th. On February 22d Dr. J. N. McCormack very happily entertained a good audience. They have accepted the broad spirit of the profession and taken into their Society two members who were educated as Homeopaths, making a total membership of twenty-one. No epidemics have been reported.

Sussex County at their annual meeting May 20th reported there had been an unusual amount of sickness during the past year but no severe epidemics. Three new members admitted during the year and no deaths. The annual meeting was very interesting from a scientific and social standpoint. Dr. Harvey, their Councilor, was present.

Union County. Five new members have been elected; one death, that of Dr. W. Updyke Se-lover. (Since this report was made Dr. E. R. O'Reilly died of appendicitis, May 27th). Three were suspended for non-payment of dues; thus the membership remains the same as last year. Four regular and four special meetings were held during the year. On February 8th Dr. McCormack talked to the profession for a short time and then adjourned to a public hall where he addressed a mass-meeting. His talk was instructive and entertaining, and the Society are still considering his suggestions. Twice during the winter a delegation went to Trenton to help the Legislative Committee fight the Osteopathic Bill. Several excellent papers have been read and a number of interesting cases have been reported. The usual number of cases of Scarlet Fever, Measles and Whooping Cough, together with La Grippe and Pneumonia, have prevailed, while Diphtheria has been almost epidemic.

Moved and seconded that it be received and its recommendations adopted. Carried.

The report of the Committee on Publication was read by Dr. Chandler, the Chairman of that committee.

REPORT OF THE COMMITTEE ON PUBLICATION.

At the beginning of the year, owing to the selection of Dr. D. C. English as editor, a vacancy occurred in our committee which was filled by the President in appointing Dr. E. J. Ill in the place of Dr. English. The meetings of the committee have been held monthly during the most of the year and have been characterized by the greatest harmony. The editor has been uniformly present and has aided with his advice and experience.

The committee has been indirectly interested in the printing of the annual program and more immediately in the preparation of the By-Laws in pamphlet form. This latter work has been completed except the part containing the fee table. This needs revision and the committee delayed the publication in order to ascertain the wishes of the Society and to receive its instructions.

The chief labor of the committee has been connected with the publication of the JOURNAL. Owing to the small annual assessment (\$1.00 for the past year) by the Society your Committee deemed it best to exercise economy in the expenditures for the JOURNAL. We therefore printed but few papers outside of those read at our annual meeting and at the meetings of the county societies. We refrained from making many excerpts from other journals and thus swelling the size of our

journal. Many editorials have been presented on topics occupying the minds of the medical profession. All the correspondence and news items obtainable by reporters and others in the different counties have been inserted, and we have sought in every way to make the JOURNAL a welcome messenger—bearing its monthly installment of the transactions interspersed with interesting communications from various parts of the state.

During the coming year the JOURNAL will be enlarged by increasing the number of pages of each issue. Our revenues will be sufficient to admit of this without embarrassment to the treasury. In this matter we shall need and expect the hearty coöperation of all members—each one making personal exertion to collect some item of interest, to give brief details of some unusual case, to collate hospital notes and in various ways add to the interest and value of *your* JOURNAL.

The financial report of the JOURNAL is more favorable than any hitherto made.

We have received from

Advertisers	\$1,150.22
Sales of JOURNALS and special sub-	
scriptions	18.43
The Treasurer for the JOURNAL ac-	
count	1,751.15
	<hr/>
	\$2,919.80

We have paid

The Orange Chronicle Co.....	\$1,226.59
The Editor (9 months' salary).....	460.62
For sundries	93.23
	<hr/>
	\$1,780.44

A question often asked is, "What does it cost the Society to publish the JOURNAL?" also, "How does this expense compare with that formerly incurred in issuing the 'Transactions'?" We can ascertain that by the consideration of two totals in the cash book—the total amount received from the Treasurer for the JOURNAL account, and the total amount turned back into the treasury from the receipts of the JOURNAL.

We have received from the Treasurer for the JOURNAL expenses	\$1,771.15
We have returned to the Treasurer from the JOURNAL receipts	1,139.36
	<hr/>
	\$631.79

Net cost to the Society..... \$631.79
To this should be added about \$200.00 to cover the salary of the editor for the last quarter and to meet several small unpaid bills. This gives a total of \$832.00 as the entire cost to the Society for journalizing its transactions. The publication of the transactions formerly cost about \$1,000.00 annually (average cost for six years, 1897 to 1903, was \$973.00) and with the present increased cost of labor and materials it would probably amount to between \$1,000.00 and \$1,200.00. We are therefore on an economical basis in the present mode of issuing our transactions and to most of our members the new method is more acceptable.

Many of the older members are well aware of the fact that payment of their annual assessments includes payment of their subscription to the JOURNAL. But new members are not cognizant of this fact or if so they have an erroneous view of the period of time this subscription covers. One cause for this error lies in the varying periods at which the State Society, the JOURNAL and the county societies begin their fiscal years. The State Society begins its fiscal year with its annual meeting. The JOURNAL year begins on July 1st. The county societies hold their annual meetings

in different months from December to June inclusive. New members may come into the county societies almost any month in the year. They pay their dues, including the assessment for the State Society, to the Treasurer of the County Society. This puts them in good standing in the County Society for the County Society year.

The County Treasurer, however, does not immediately pay these assessments to the Treasurer of the State Society but holds them until one month before the annual meeting of the State Society and then pays them over with the other assessments for the coming year. Consequently the new member is, as it were, unknown and not in good standing in the State Society. He wonders why he does not receive his JOURNAL and why his name is not certified to the A. M. A. as a member in good standing in the State Society, while the State Society may have no knowledge of his membership in the County Society and has not received the assessment which entitles him to good standing. The situation would be less perplexing if all the county societies had a common date for their annual meetings, and if the State Society and the JOURNAL adopted a common date for the beginning of their fiscal years.

It is almost hopeless to expect that all the county societies will adopt the same month for their annual meetings, but it is perfectly feasible for the State Society and the JOURNAL to unite on a fixed date.

In order to remove some of the perplexities your committee would recommend that the fiscal year of the Medical Society of New Jersey begin hereafter on the first day of June of each and every year, and that the year of the JOURNAL coincide therewith. We would also recommend that the assessments collected from new members of component societies be forwarded immediately with their names to the Treasurer of the State Society in order that they may be entered on the mailing list of the JOURNAL and certified to the A. M. A. as members in good standing in the State Society.

We would still further recommend that new members coming into a County Society during the first six months of the State Society year (from June 1st to December 1st) pay the full assessment of the State Society for that year; and that members joining a County Society during the second six months (December 1st to June 1st) pay one-half of the assessment and receive the JOURNAL for the corresponding time.

Respectfully submitted,

CHAS. J. KIPP,
EDWARD J. ILL,
WM. J. CHANDLER,
Committee.

Moved and seconded that the report be accepted and its recommendations be adopted. Carried.

Dr. Luther M. Halsey, Williamstown: I should like to ask at this time the unanimous consent of the Society for the consideration of a matter which, as Chairman of the Committee on Hygiene and Legislation, I deem important. You all know of the serious illness of the Hon. Joseph Frelinghuysen, which, for a time, seemed likely to prove fatal. The Senator is now much better, but he is still ill at a hotel in Chicago.

At the last session of the Legislature he volunteered his services as the champion of any measure that the Society might wish, and I can say that I have always found him very willing to do everything he could. It was largely through his exertions that we have on the statute-books the present pure-food law and that the osteopathic bill was defeated. Therefore, I move that the Secretary be instructed to send a telegram to him at the Auditorium Hotel, stating that the Medical Society of New Jersey hopes and trusts that he will speedily recover.

Dr. English: I would not only support such an expression of sympathy, but would add that we appreciate his services.

Dr. Marcy: The motion as amended by Dr. English, if Dr. Halsey accepts the amendment, is before you.

Motion seconded. Carried. Secretary instructed to send the telegram.*

Dr. Thomas W. Harvey, Orange: In the absence of the Chairman of the Judicial Council, who has sent only a partial report, I move that the reading of the report be postponed.

Motion seconded and carried.

Dr. Chandler: I have here the report of Dr. Mary E. Gaston, of Somerville, a delegate to the Medical and Chirurgical Faculty of Maryland. I move that it be accepted and printed with the minutes of the Society.

Motion seconded and carried.

REPORT OF THE ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

The annual meeting of the Medical and Chirurgical Faculty of Maryland held in Baltimore April 23rd to 25th inclusive was productive of a number of valuable papers and of much interesting discussion.

The President, Dr. Hiram Woods, in his address on the "Medical and Chirurgical Faculty; Its Debt to Itself and the Public," laid special emphasis on the necessity of better relations between the profession and the lay press. He also advocated such changes in the medical laws of the state as would bring them in full conformity with the standard adopted by the American Medical Association.

Among other interesting papers was one read by Dr. Reik on the "Necessity for Surgical Intervention in the Treatment of Chronic Suppurative Otitis Media"; and one by Dr. Allen on "The Present Status of Vaginal Cesarean Section."

* The following is the text of the telegram:
To Hon. Joseph S. Frelinghuysen,
Auditorium Hotel, Chicago, Ill.

The Medical Society of New Jersey in annual meeting assembled send greetings.

We appreciate your services in behalf of scientific medicine and sincerely hope for your speedy restoration to health.

WM. J. CHANDLER, Sec'y.

Dr. Sanger's contribution on "Tonsillar Infections" provoked an animated discussion. "The Present Status of the Anti-tuberculosis Movement in Maryland" was given by Dr. Fulton, and "The Value of Laboratory Methods in the early Diagnosis of Gastric Carcinoma" was presented by Dr. C. Urban Smith. Dr. Young gave the diagnosis and treatment of calculus of the lower end of the ureter.

On the last day of the session there was a joint meeting of the faculty with the Maryland State Conference of Charities and the Maryland State Conference of Women's Clubs with the special object in view of instructing the public, in so far as it was there represented, in the dangers of the social evil and of urging the coöperation of the public in an organized campaign against it.

Dr. Prince A. Morrow, of New York, gave an address on the "Prophylaxis of Social Diseases." Dr. Lillian Welsh, of Baltimore, followed with a paper on "The Prophylaxis of Social Disease in the Home."

Dr. Emerson treated of the duty of the organized medical profession in fighting the social evil.

The interest aroused was evidenced by the earnest attention given by a large and intelligent audience.

Respectfully submitted,

MARY E. GASTON.

Somerville, N. J., June 24, 1907.

Dr. Marcy: The next business is the reception of delegates from other societies. If any are present we shall be pleased to receive them at this time.

No delegates were present at this time.

The report of the Committee on Prize Essay was read by Dr. Charles J. Kipp, of Newark, the Chairman of that committee:

"The Committee on Prize Essay would report that they have received two essays on Pneumonia, and that their unanimous decision is that the one under the nom-de-plume of E. D. Lowe is decidedly the better essay; but they exceedingly regret that they deem neither of the essays entitled to the prize, because they fail to meet the one important requirement of the prize-offer—originality of thought.

"Recognizing, however, the general excellence of the essay, that we have judged the better one, and believing that it very fully and tersely sets forth our present knowledge of and belief concerning pneumonia, we give it honorable mention; request a copy of it for publication in the JOURNAL and recommend that the Publication Committee present the author of it with two hundred and fifty or more reprints of the same.

"(Signed) CHARLES J. KIPP,
D. C. ENGLISH."

Moved and seconded that the report be accepted. Carried.

Dr. Marcy: This finishes the program for the morning. The Chair would like to announce that from this time on the sessions will begin promptly at the hours indicated on the program. A motion to adjourn is in order.

Motion made and carried at 12.45 P. M.

MEETING OF THE HOUSE OF DELEGATES.

*Tuesday Afternoon, June 25th.
3 o'clock.*

The invocation was offered by Rev. George L. Dobbins, of Long Branch:

Almighty God, our Heavenly Father, we recognize Thee as the source of our being and the giver of all our mercies, and are grateful. We thank Thee for the revelations of Thyself which Thou hast made in Thy written Word, in Thy works of creation, and redemption and providence, and in history. We thank Thee for all these blessings that Thou hast conferred upon the human family. We thank Thee especially that Thou hast been pleased to store away in the various laboratories about us, particularly in nature, remedies for those diseases that afflict us from time to time; and we thank Thee that Thou art giving to men wisdom to find these remedies and to apply them successfully. We thank Thee that Thou hast raised up men and women, and called and recognized them, to heal the body and care for it in the time of its affliction. We thank Thee, further, for the organization represented here this afternoon. We pray that while this anniversary service is being held, from this time forth, nothing may occur to mar its harmony or interfere with the wise plans that have been laid for it; and we pray that everything that does occur may redound to Thy glory and the good of those that are gathered here. May these men, who believe that in the multitude of councillors there is wisdom, and have found it demonstrated again and again, find it demonstrated anew in this anniversary visit. We ask these things, together with all needed mercies, through our Lord, Jesus Christ. Amen.

Dr. Marcy: It affords me a great deal of pleasure to introduce Mayor McFadden, of Long Branch, who will deliver the Address of Welcome:

Mayor McFadden: We desire to extend a hearty welcome to the Medical Society of New Jersey. We have a warm spot in our hearts for physicians, probably from a mere personal motive; for it is said that to the physicians of the State of New Jersey is largely due the success and the activity in building up one or two seaside resorts. We extend to you the freedom of the city during your stay.

Dr. Marcy: In behalf of the Medical Society of the State of New Jersey, it is my pleasure to thank you for the very generous and cordial welcome extended to us. I am quite sure that if Long Branch needs building up, we should be glad to have you invite the Medical Society of New Jersey to come here and build it up for you.

Announcement of the names of the Nominating Committee.

Dr. Chandler: I will read the names of those that have been reported: Atlantic County, Theodore Senseman; Bergen, Samuel Armstrong;

Burlington, Enoch Hollingshead; Camden, Downing Benjamin; Cumberland, Ellsmore Stites; Essex, Archibald Mercer; Gloucester, H. A. Stout; Hudson, John J. Baumann; Mercer, William S. Lator; Middlesex, Alfred L. Ellis; Monmouth, D. D. Hendrickson; Morris, John Walters; Ocean, William H. Schaffler; Passaic, B. L. Magennis; Salem, W. L. Ewen; Somerset, Aaron L. Stillwell; Sussex, B. W. Ferguson; Union, J. B. Harrison.

Dr. Mercer: I should like to state that there are two vacancies in the Hudson County delegation of permanent delegates. The names of two nominees have been forwarded by the Society.

Dr. Marcy: The election of permanent delegates was deferred for future action. It is proper to take it up now, if there are no objections.

Moved and seconded that the Society proceed to the election of permanent delegates. Carried.

Dr. Mercer: Hudson County has nominated Samuel A. Helfer and John C. Parsons, and Cumberland County presents the name of Dr. Ellsmore Stites, who has a certificate that does not exactly follow the wording of the form made out for the nomination of permanent delegates. There is no question but that he has been regularly elected from Cumberland County; and I do not think that he should be excluded because the exact wording has not been followed, since he is regularly elected to represent the Society.

Dr. Marcy: The constitution provides that permanent delegates shall present a certificate signed by the President and Secretary of the component Society and made out in the following form:

"This is to certify that _____, M. D., was nominated for permanent delegate to the Medical Society of New Jersey on the day of, 190 , by the component Society of the County of, according to the requirements of the Constitution and By-laws of the Medical Society of New Jersey."

It is very plain as to what the paper should be; and I think that it is a matter for the house to decide, whether they will accept a credential that has not followed that form.

Dr. Mercer read the credential of Dr. Stites.

Dr. Marcy: I think that it is within the province of the house to decide whether they will accept this.

Moved and seconded that it be accepted in the form in which it was read. Carried.

Dr. Marcy: Are there any other nominations for permanent delegates?

Dr. Walter B. Johnson, Paterson: I

should like to ask a question for information: If a permanent delegate of this Society becomes a Fellow may he resign as a permanent delegate and leave a vacancy which his component Society can fill?

Dr. Marcy: I shall refer the matter to our Secretary.

Dr. Chandler: I am glad that Dr. Johnson has brought up this question, because there is no provision made in our constitution on the subject of resignations. This is probably an oversight. It would seem that a resignation should create a vacancy, and that it would be competent for a component Society to select nominees to fill this vacancy; and while my impression is that this has been done in one or two instances, it would be well to have the Society express its opinion as a precedent for future action.

Dr. Johnson: I move that in case of the resignation of a permanent delegate, such resignation shall cause a vacancy, to fill which a nominee can be selected by the component Society to which he belongs.

Dr. ———: I should like to make an amendment by putting in the word death, making the phrase read: "death or resignation of a permanent delegate."

Dr. Chandler: Provision is already made for vacancies created by death.

Dr. Fisher: There is already a precedent on this question. In Somerset County one of the permanent delegates was elected an officer of the Society, and thereupon tendered his resignation as a permanent delegate, and his place was promptly filled. This was five or six years ago.

Dr. Johnson's motion was seconded and carried.

Dr. Johnson: I should like to resign as a permanent delegate.

Dr. Marcy: Please present your resignation to the Secretary in writing. It requires a three-fourths ballot to elect a permanent delegate.

Moved and seconded that the Secretary be instructed to cast a ballot for the election of all these permanent delegates. Carried. The Secretary was instructed to do so, and they were declared elected.

The report of the Recording Secretary was read by Dr. Chandler.

REPORT OF THE RECORDING SECRETARY.

There have been as usual many changes in the membership of the component societies owing to accessions, removals, deaths and resignations, and yet the total membership is not essentially changed numerically from that of last year. We then reported a membership of 1229. We now have 1232.

There are in several of the counties a large number of delinquents. This is an ominous condition. While it may be due to accidental or unpreventable causes it is suggestive of some internal defect in the component society. These societies are the foundation of the State Society, and while their attractiveness and effective activities depend very largely on the ability and energy of their secretaries, yet no one secretary can carry on his shoulders and infuse life and spirit into a moribund mass of formally organized entities, which can be aroused only once or twice a year to a semblance of vitality and then merely for the sake of exhibiting those signs of life necessary to retain their right to a legal existence. The County Society exists for a purpose. It has duties to perform—duties to its members, duties to the community in which it exists, as well as duties to the state organization of which it is a part. It is therefore appropriate for secretaries and members, as well, of component societies having but little community of interest and a large roll of delinquents to study carefully the causes of these conditions and seek to overcome them during the ensuing year.

The list of Permanent Delegates as made up for the Supplement to the August JOURNAL contained 113 names. We have lost one, Dr. Daniel M. Skinner, of Essex, by death. No other deaths have been reported and we had on our list at the opening of this session 112 names. There exist at present vacancies in most of the component societies. Camden, Cumberland, Cape May, Hudson, Sussex and Warren are entitled to fill vacancies. Bergen, Essex, Passaic, Sussex, Union and Warren will be entitled to select nominees next year, provided their membership does not diminish. Several other societies have so nearly the required membership that a few accessions at or before their next annual meetings will entitle them to select nominees to fill their vacancies.

The following Permanent Delegates have been absent from two consecutive annual meetings: Wm. S. Jones, Thos. S. B. Fitch, Wm. B. Graves, C. F. Adams, Samuel Johnson and F. W. Flagge. The Councilors report that satisfactory excuses have been received from all of these delegates, and their names are retained in the list.*

The inroads of death have been noted in the report of the Councilors, and yet it is not inappropriate to pass one more tribute to the memory of our late President. Great as is the loss to his community and to his medical confreres, the loss to this Society is equally great. A popular, lovable man, with quick perceptions, honest purposes, ability and willingness to work and in the prime of his manhood, Henry W. Elmer would have been a forceful character in any body of men, and his loss will be deeply felt by the Board of Trustees and the Fellows of this Society.

The conditions possible to result from the neglect of the secretaries or treasurers of component societies to make the reports and perform the duties required of them in the by-laws have excited considerable interest among our members and have given rise to differences of opinion. Questions of vital importance to the members of such societies were involved, and it was deemed advisable to obtain an unbiased and authoritative opinion. The following questions were submitted to the consideration of an eminent jurist—a member of our Supreme Court:

“(1). Can a component society which has not

met the requirements of the constitution and by-laws of the State Society regarding the payment of assessments and the making of reports be legally debarred from participating in the proceedings of the said State Society; and are the individual members of the component society thereby disqualified from performing their duties as officers or committeemen of the State Society?

“(2). Is a member of such debarred society who is a member of the American Medical Association, by reason of the payment of five dollars—annual dues thereto—and also by reason of maintaining good standing in his State Society, disqualified from performing any duties as an officer or committeeman of the American Medical Association during the period of such debarment?”

In answering a portion of these questions, the opinion states: “That the debarring of a component society for the fault of its Secretary or other officers, *prima facie* affected each of its members, so that he cannot as of right participate in state assembly; *but* that it was within the province of the state body upon ascertaining that no personal dereliction attached to such member, to consider him, by its action, as competent to act as if the local body, or its officials, had properly performed their duties toward him in his behalf. This power resides in the state body and owing to its peculiar provision for a vicarious penalty should be exercised.”

In answer to the question, “When does the ‘suspension’ begin and when does it terminate?” the reply, in brief, is that “The suspension begins with the date of the default and continues until the assessments have been paid and all reports sent in. It then terminates. The House of Delegates has the power to terminate it at any time, if it chooses.”

Answering all of these questions more fully, the opinion states: “Article IV of the constitution by section 1 provides that the whole Society shall be composed of ‘members in good standing’ of component societies.” By section 5 it provides that “all members of *component societies in good standing*” are constituted associate delegates, etc. The constitution therefore creates two criteria of good standing. In the one case it is the *member* who is to be in good standing; in the other it is the *component society*—a practically important distinction.

This distinction is apparently carried out in the by-laws. Chapter I Sec. 2, provides for the transmission by the County Secretary of four lists, the fourth of which concerns members who have paid *their* assessment and such list is made evidence of *their* right to register at the annual meeting. This section evidently applies to class one, created by Sec. 1 of Constitution Art. IV.

Chapter XII, Sec. 2, concerns “component societies” and hence applies to class two, created by Sec. 5, Constitution Art. IV, and is in the nature of a penalty rather than a qualification.

The result is that a *member* who is reported as having paid *his* assessment is entitled to register at the annual meeting and to whatever rights that implies, regardless of the rights that would accrue to him by reason of the Secretary’s having complied with Chapter XII, Sec. 2. If a member cannot claim this *individual* right either because he has not paid his assessment, or because his Secretary will not report that fact, he is relegated to his rights as a member of a component society, which he cannot successfully claim as long as his

*The corrected list now contains 115 names.

society is being disciplined for the fault of its Secretary.

In his relation to the American Medical Association, a member who is reported under Chapter I, Sec. 2, as having paid his assessment would be in good standing even though his *Society* was under suspension according to Chapter XII. My reason for saying this is that the National Body would not be likely to give any effect to a mere disciplinary penalty as affecting the substantial standing of an individual delegate. If therefore, even now (June 5) the Secretary of a component society will furnish a list of its members who have paid their assessments, such members would be entitled to whatever Chapter I, Sec. 2, confers upon them both in relation to the state and national bodies.

The proviso in this section as to "at least one month," is merely directory and the time as fixed may be waived.

The jurist adds this comment on Chapter XII: "The difficulty arises from your by-laws making a matter of substantial and individual importance to the members depend upon the technical observance of his duties by the Secretary or Treasurer. It is very much as if my right to vote for Presidential electors were made to depend upon whether the Treasurer of the Borough of Merchantville had properly accounted for my last year's taxes. In fact, it punishes me for his default and lets him go scot free."

In view of this the Justice suggests the following amendment to By-Laws, Chapter XII, Sec. 2: Strike out the first four lines and insert the following: "If the proper officers of any component society shall fail to pay over its assessments or to make reports as required in this constitution and by-laws, the President of such Society shall at once be notified of such default and, if at the expiration of one week from the mailing of such notification the default shall continue to exist, the said Society shall be held as suspended," etc.

This is an additional safeguard, although it does not entirely do away with its vicarious viciousness.

About one month ago it became necessary to change the place of holding the annual meeting. We met last year at Atlantic City and many members wish to meet next year at the new hotel in Cape May. It was desirable, therefore, to hold the present meeting in some central location more accessible to the members from the northern parts of the state. This precipitated a large amount of work upon the Committee of Arrangements. It was impossible to obtain any large hotel on the central seacoast. After the Board of Trustees decided on the location, the committee acted with great promptness and energy and to them are due the special thanks of the Society for the provision they have made for our comfort and entertainment.

While nothing of momentous import has occurred in the affairs of this Society during the past year, its influence has been exerted for the benefit of the people of this state in many ways. Let us strive during the coming year to be faithful to every duty, to improve every opportunity to advance the cause of scientific medicine and thus promote the welfare of this great commonwealth.

Moved and seconded that the report be received. Carried.

Dr. Marcy: Will you take any action upon the recommendations in the report?

The report of the Treasurer was read by Dr. Mercer.

REPORT OF THE TREASURER, 1907.

Dr. Archibald Mercer, Treasurer, in Account with the Medical Society of New Jersey.

CREDIT.

1906—

June 22—Burlington County, additional payment for 1906..... \$3.00

June 22—Morris County, additional payment for 1906..... 3.00

June 22—Passaic County, for San Francisco fund 5.00

June 23—Hudson County, additional payment for 1906..... 1.00

June 23—Journal; sales, subscriptions and advertisements 558.21

June 25—Essex County, additional payment for 1906..... 1.00

July 2—Interest, bond No. Pac. Grt. North., C., B. & Q. Coll.. 10.00

July 2—Interest bond, Chicago & Alton 17.50

July 3—Dr. E. Marvel, Committee of Arrangements, 1906.... 55.75

Aug. 1—Interest, bond, N. Y. Central, Mich. Cent. Coll..... 17.50

Sept. 1—Burlington County, additional payment for 1906..... 8.00

Sept. 10—Essex County, additional payment for 1906 3.00

Oct. 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll.. 10.00

1907—

Jan. 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll.. 10.00

Jan. 1—Interest, bond, Chicago & Alton 17.50

Jan. 22—Hunterdon County, additional payment for 1906 1.00

Feb. 1—Interest, bond, N. Y. Central, Mich. Cent. Coll..... 17.50

Feb. 12—Subscription to Journal 2.00

April 1—Interest, bond, No. Pac., Grt. North., C., B. & Q. Coll.. 10.00

April 17—Union County, additional payment for 1906 1.00

April 24—Committee on Publication—Journal 300.00..

May 31—Cumberland County, additional payment for 1906 1.00

May 31—Camden County, additional payment for 1906 1.00

June—

Bergen Co. assessment... 94.00

Burlington Co. assessment 60.00

Camden Co. assessment... 170.00

Cape May Co. assessment. 46.00

Cumberland Co. assessm't. 80.00

Essex Co. assessment..... 566.00

Gloucester Co. assessment 50.00

Hudson Co. assessment... 298.00

Mercer Co. assessment... 150.00

Middlesex Co. assessment. 76.00

Monmouth Co. assessment 76.00

Morris Co. assessment... 104.00

Ocean Co. assessment.... 30.00

Passaic Co. assessment... 180.00

Salem Co. assessment.... 42.00

Somerset Co. assessment. 48.00

Sussex Co. assessment....	36.00
Union Co. assessment....	164.00
Warren Co. assessment....	48.00
June 15—Committee on Publication—Journal	839.36
	<u>\$4,211.32</u>
Cash balance in bank June 13, 1906	3,183.41
\$1,000 bond, No. Pac. and Grt. No., C., B. & Q. joint 4s...cost.	\$972.50
\$1,000 bond, C. & A. 3½s...cost.	786.25
\$1,000 bond, N. Y. Cent., Mich. Cent. Coll. 3½s.....cost.	912.50
	<u>2,671.25</u>
	<u>\$10,065.98</u>

DEBIT.

1906—	
June 22—Dr. W. J. Chandler, Committee on Programme....	\$64.60
June 22—Dr. W. J. Chandler, Committee on Publication.....	124.56
June 22—Whitehead & Hoag, for Badges	27.58
June 22—Dr. A. Mercer, Treas..	14.39
June 25—Dr. E. Franklin Smith, Stenographer	65.00
June 25—Dr. J. R. Chambers, Chairman Scientific Committee	8.00
June 25—Dr. Daniel Strock, Corresponding Secretary	12.50
June 27—Dr. Frank Billings, Treas. A. M. A. for San Francisco Physicians	410.70
July 7—Dr. Philip Marvel, C'l'r.	24.73
July 7—Dr. W. A. Clark, C'l'r..	3.94
July 7—Dr. T. W. Harvey, C'l'r	5.50
July 7—Dr. W. H. Iszard, C'l'r.	4.70
July 7—Dr. W. J. Chandler, Committee on Publication....	115.87
July 7—Dr. W. J. Chandler, Secretary	101.17
July 11—L. J. Hardham Co., Printing	11.25
July 11—Dr. R. C. Newton	141.79
July 23—Fidelity and Casualty Co., Treasurer's bond	15.00
Sept. 7—Dr. W. J. Chandler, Committee on Publication....	134.90
Sept. 7—Dr. D. C. English, Secretary Board of Trustees....	5.75
Sept. 13—Dr. W. J. Chandler, Committee on Publication....	180.13
Sept. 13—Dr. W. J. Chandler, Secretary	94.60
Oct. 20—Dr. W. J. Chandler, Committee on Publication....	249.87
Nov. 21—Dr. W. J. Chandler, Committee on Publication....	90.16
Dec. 19—Dr. W. J. Chandler, Committee on Publication....	87.93
1907—	
Jan. 14—Dr. W. J. Chandler, Committee on Publication....	281.27
Jan. 14—Dr. W. J. Chandler, Secretary	88.70
Feb. 23—Dr. W. J. Chandler, Committee on Publication....	84.00
April 2—Dr. W. J. Chandler, Committee on Publication....	103.81
April 18—Dr. L. M. Halsey, Committee on Legislation....	450.00
April 26—Dr. W. J. Chandler, Secretary	79.01

April 26—Dr. W. J. Chandler, Committee on Publication.....	232.44
May 25—Dr. W. J. Chandler, Committee on Publication.....	86.19
	<u>\$3,399.44</u>
Cash balance in bank, June 17, 1907	3,994.67
\$1,000 bond, No. Pac. and Grt. No., C., B. & Q., joint 4s...cost.	\$972.50
\$1,000 bond, C. & A. 3½s...cost.	786.25
\$1,000 bond, N. Y. Cent., Mich. Cent. Coll. 3½s.....cost.	912.50
	<u>2,671.25</u>
	<u>\$10,065.98</u>

Respectfully submitted.

ARCHIBALD MERCER, *Treasurer.*

June 25, 1907.

Moved and seconded that the report be received and take the ordinary course. Carried.

Report of the Board of Trustees, read by Dr. Kipp.

Dr. Kipp stated that at a special meeting of the Board in July, 1906, Dr. David C. English was unanimously elected editor of the JOURNAL. Dr. English was at first quite reluctant to assume the responsibility, but after consideration consented, and has discharged his duties to the complete satisfaction of the Board.

That the Board reorganized June 24, 1907, by reelecting Drs. C. J. Kipp as chairman, and D. C. English, secretary. That the report of the Treasurer, showing balance on hand, cash \$3,994.67 and bonds, par value \$3,000, had been audited by Drs. Fisher and Johnson and was found correct.

That the report of the Publication Committee by Dr. Chandler, chairman, had been considered, and the trustees approved its recommendations as follows: That the JOURNAL be enlarged by increasing the number of pages; that the fiscal year hereafter begin on June 1st each year; that new members joining County Societies before December 1st pay \$2 assessment of State Society, and after December 1st \$1. The committee was directed to renew the contract with Dr. English as editor of the JOURNAL for the coming year and the thanks of the Board were extended to him for his services during the past year.

That the Trustees had heard and approved the report of Dr. Halsey, chairman Committee on Legislation, and most of the recommendations were approved and referred to the Society. That the committee had been authorized to employ an attorney if they deemed it necessary, and also to employ a man to watch legislation relating to medical matters and report to the committee.

That several amendments to the By-Laws were considered. The following were recommended to the Society for adoption: Those suggested by Judge Garrison, Dr. Ward's changing the quorum of the Society from twenty annual delegates to twenty members; also requiring reports of County Secretaries and Treasurers to be sent in two weeks before the beginning of the fiscal year.

That Drs. McGill, Ill and Chandler were appointed a committee to revise the fee bill rates.

That Drs. D. C. English, William Elmer, H. Mitchell and W. J. Chandler were reappointed as the Finance Committee.

Drs. C. J. Kipp, D. C. English and William Elmer were appointed as the Prize Essay Committee.

That the question had been considered "When does the suspension of a County Society that has failed to report cease?" and the Board decided, "When they had paid their assessment and sent in their reports to the Secretary."

That a special Advisory Committee was appointed to confer with the Committee on Legislation, when desired by them, with power to act for the Board in case of emergency. Drs. McGill, Godfrey and Marcy, with the President, were appointed.

That we offer two prizes for essays the coming year; for the best essay \$100 in cash, for the second best a gold medal of value of \$50. The Committee on Prize Essay was authorized to select the subject and announce the conditions of award.

That all the members of the Board of Trustees are present at this annual meeting but one who is detained by illness.

Moved and seconded that the report be received and approved. Carried.

Miscellaneous business was next in order.

Dr. English: I move that the recommendations of the report of the Recording Secretary be referred to the Board of Trustees with power to adopt the same, if they see fit.

Seconded and carried.

Dr. Chandler: I should like to introduce, in accordance with the recommendations adopted by the Society this morning, two amendments to the by-laws. The first is this: "Assessments for the current fiscal year of the Medical Society of New Jersey received by the Treasurer of a component Society from a new member or from a reinstated member shall be immediately forwarded to the Treasurer of the Medical Society of New Jersey; and no member shall be considered as in good standing in a component Society until his assessment for the current year of the Medical Society of New Jersey has been paid." This is to be inserted at the end of Section 1, Chapter XII.

The second amendment is to be added to Chapter XII of the by-laws as Section 3, and Section 3 will then become Section 4. "The fiscal year of this Society shall begin on the first day of June in each and every year. Each member received into a component Society between the first day of June and the first day of December shall pay the full assessment of the Medical Society of New Jersey for that fiscal year, but each member received between the first day of December and the first day of June following shall pay one-half of that assessment."

I should also like to introduce the amend-

ment suggested by Judge Garrison, which can be modified at the second reading by the Board of Trustees, if so ordered. That which I first read was the ending of Section 1, Chapter XII. In Section 2, strike out the first four lines, and substitute: "If the proper officers of any component Society shall fail to pay over its assessments or to make reports as required in this Constitution and By-laws, the President of such Society shall at once be notified of such default; and if, at the expiration of one week from the mailing of such notification, the default shall continue to exist, the said Society" shall be held as suspended, etc.

Dr. Marcy: Amendments to the by-laws may be made at any annual meeting by a two-thirds vote of the House of Delegates, if fifty members are present, and if the amendment has been twice read in open meeting and laid on the table for one day.

Dr. J. W. Ward, Trenton: In view of the fact that it is almost impossible to get a sufficient number of the Society together in the morning at the opening of the meeting, I would move this amendment to the by-laws: Chapter IV, Sec. 2, reads: "Twenty annual delegates, representing at least four component societies in good standing, shall constitute a quorum." We never can get that quorum together in the morning at the opening of our sessions. I shall, therefore, move this amendment: Strike out in the first line the words "annual delegates" and insert "members."

Dr. George E. McLaughlin, Jersey City: Owing to the absence of three of our annual delegates, our delegation has selected three alternates. I request that Drs. Aaron Friedman, John J. Baumann and J. G. L. Borgmeyer, of Jersey City, be appointed alternate delegates.

Dr. Marcy: These gentlemen are appointed as requested.

Dr. Mercer: I should like to present an amendment to Dr. Chandler's amendment to the by-laws. There is a by-law which requires that the assessments shall be paid by the component Society one month before the "annual meeting." I should like to have it made to read one month before the "beginning of the fiscal year." (Chapter XII, Sec. 1, seventh line.)

After some discussion as to the time of paying the annual assessments the matter was referred to the Board of Trustees for consideration.

Dr. Marcy: This amendment will then take the same course as the original amendment.

Dr. Harvey: The Chairman of the Judicial Council has asked me to present this report:

REPORT OF THE JUDICIAL COUNCIL.

To the Medical Society of New Jersey:

In presenting this our fifth report we have to regret its great length, but feel that the work of the past year could scarcely be summarized with less detail and at the same time be intelligible. The Council met in the early part of October and formulated certain recommendations, which were communicated to each of the component societies. In most of the societies the recommendations, or some part of them, have been adopted. These recommendations are as follows:

The Council unanimously endorses the recommendations made to the component societies in 1905 and 1906, and particularly urges the establishment of the same, wherever not at present a part of the program and practice of the society, and further asks the cooperation of each component society in the adoption of the following additional recommendations:

1. It is of great importance to the State Society to have an enrollment of all the practitioners of medicine in each councillor district, and particularly of those who are members of the regular profession, but are not yet members of the component societies; we, therefore, recommend that the secretary of each component society secure the names and addresses of these practitioners and also of practitioners of medicine of other schools, practicing in his respective county, and mail the same to the secretary of the Board of Councillors, at least sixty days before the next meeting of the State Society.

2. The insurance question is one of no small importance to the medical profession; your councillors, therefore, recommend that specific information, through the respective component societies in each district, concerning the charges made by different physicians for insurance examinations be *ascertained* and the same reported to the secretary of the Board of Councillors at least thirty days before the next stated meeting of the State Medical Society.

3. Each component society has its peculiar needs in respect to society affairs. Therefore, in so far as the Board of Councillors of the State Medical Society may be of benefit to the councillors or censors of the respective component societies in advancing and adjusting these matters, the former offers its assistance to that end and invites the councillors of the component societies to consider matters of society interests with them.

4. In view of the forthcoming itinerary of Dr. J. M. McCormack, who will visit the component societies in the State, each component society is requested to assist in arranging a State program. Your Board of Councillors recommend that the meetings begin in the northern part of the State and continue on appointed days, as will hereafter be determined. It is particularly requested that these meetings be arranged so that medico-social questions shall be fully discussed, and that leading citizens in their respective localities be invited and urged to be present. The advantage of such meetings is obvious to both the profession and the citizens of the community, when we consider that their purpose is to acquaint the public with the "health interest," and for the support of which physicians are endeavoring to secure proper legislation. The Board of Councilors particularly

asks that each component society give this matter careful consideration, and that each endeavors to make the meeting in its locality a success.

REPORT OF COUNCILOR FOR DISTRICT NO. 1.

In accordance with the resolutions passed at the meetings of the Council October 2, 1905, arrangements were made for Dr. McCormack's tour of the county societies. The first meeting was at Newark on February 1, 1907. Dr. McCormack visited every county in the State excepting Ocean and Monmouth. In many places two meetings were held, one for the public. The doctor's addresses were appreciated very highly by all who heard them.

Resolutions against contract practice were passed by Essex County, but nothing has been done to enforce them. In the Oranges, however, a paper was signed by all the legally qualified physicians, agreeing not to do contract practice. Three of the men who signed this agreement are supposed to have gone back on their word, and are working for the societies at the old rates. This matter is being investigated and when proven it is proposed to move against them in the county society. It is held that having signed the agreement willingly, their failure to keep their word disqualifies them from association with other physicians or membership in medical societies.

Respectfully submitted.

THOS. W. HARVEY.

June 1, 1907.

REPORT OF COUNCILOR FROM DISTRICT NO. 2.

Dr. Philip Marvel, Chairman of Board of Councilors, New Jersey State Medical Society.

Dr. Harvey requests me to send my report as councilor to you. I have very little to report. Although in touch with all the county societies in my district, I have during the last year only visited that of Passaic. I am informed that they are in a flourishing condition and are increasing in membership. During the visit of Dr. J. N. McCormack to this State, I arranged meetings of the county societies in Passaic, Bergen, Union and Hudson, which meetings were addressed by him.

Truly yours,

J. L. LEAL.

Paterson, N. J., May 31, 1907.

REPORT OF COUNCILOR FOR DISTRICT NO. 3.

Philip Marvel, M.D., Chairman of Board of Councilors, New Jersey State Medical Society:

I have visited the Hunterdon, Somerset and Mercer County Medical Societies during the past year and have nothing to report save that which is gratifying, encouraging and indicative of a progressive and united spirit. The changes from year to year in the societies of this Councilor district, looking toward the elimination of irregularities and the fostering and cultivation of a closer feeling of unity and fraternalism, have been markedly noticeable. Each of the meetings at which I was present was largely attended. The papers read and the subjects discussed were of an advanced and scientific character. It is the purpose of each of the societies to adopt, in whole or in part, the plan of University Extension teaching, to be inaugurated by the American Medical Association, and which has been brought to our attention by Dr. McCormack. Arrangements have also been made for the inter-visitation of members among the societies comprising this dis-

trict, each visitor to read a paper. My failure to visit the Middlesex County Society is due to the fact that I received no notice of the meeting. I will endeavor to obtain from the secretary a synopsis of the year's work, which I will forward later as a supplement to this report.

Respectfully submitted.

W. A. CLARK.

Atlantic City, May 16, 1907.

REPORT OF COUNCILOR FOR DISTRICT NO. 4.

Philip Marvel, M. D., Chairman of Board of Councilors, New Jersey State Medical Society:

As Medical Councilor of the Fourth District, I desire to report that the profession is more active and alive to the advancement of the higher, broader and more honorable principles of the calling than heretofore.

In the counties of Burlington, Monmouth and Ocean there are but very few, if any, cut-rate or contract doctors. In the county of Camden, "where the opportunities and incentives are so much greater and stronger," the few doctors that are doing a contract business are seriously debating with their own sense of dignity and honor about cutting loose from commercialism. In other respects the recommendations of the Judicial Council are being, to a greater or lesser extent, practiced. Dr. McCormack, "the exponent of the American Medical Association," was well and enthusiastically received in this district. His conversational talk with the doctors and his interesting and instructive talk to the public will be conducive of great good to both profession and people. As a result, in Camden County a post-graduate school has been organized, with a class of over twenty-five doctors, doing excellent work. With the influence of our society, the Freeholders of Camden County have raised the fee for examining the indigent insane from \$3 to \$5.

Respectfully submitted.

WM. H. ISZARD, M. D.

Camden, May 31, 1907.

REPORT FOR DISTRICT NO. 5.

I have visited all counties in the district except Cape May, and had arranged to be at the Cape May meeting in April, but was unavoidably prevented. Through correspondence and personal conversations with the members of Cape May Society, I am able to report that their meetings for the year, beginning June, 1906, and ending June, 1907, have been fairly well attended, and that the change to the quarterly meeting has been well received. As to Salem, Gloucester and Atlantic Counties, I believe each has made much greater progress from the program standpoint, and very much greater interest is shown in the individual meetings. I was present at only one of the Cumberland County meetings. The attendance was not up to what it should be in that county. While papers presented were interesting and timely, there did not seem to be the amount of interest taken in them that might have been, as there was no general discussion.

One of the interesting features of the year was the visit of Dr. McCormack, who was very well received in all of the districts, and in all of the counties with the exception of two, *viz.*, Ocean and Monmouth, where no meetings were held. It has been particularly gratifying to your councilors to note that much regret has been expressed in each of the districts that the attendance was not

larger, and solicitations have come to us through both professional and lay sources, asking that we arrange for the doctor to visit the State again at an early date. This of itself indicates that some good is developing from his itinerary.

Summing up the reports as given by the different councilors, and comparing them with those given the first year following the reorganization of our State Society, it is evident that our component societies have advanced socially, professionally and numerically. It is pleasant for your councilors to look back upon the past years and realize that some progress has been made. But in doing this we can not but regret that our recommendations have failed in some instances to receive the cooperation and support which we hoped they would. Whether the fault was ours, or was due to a misinterpretation of the recommendations or to indifference on the part of the societies, it is not our intention to ask, but we hope that each society may realize for itself that the efforts of the councilors, individually and collectively, have one object, namely, to effect an organization that shall promote the best interests of the individual and of this Society. We hope that some of the recommendations which have thus far failed of adoption by the component societies, may yet be received in spirit if not in form.

Your Council would recommend further consideration of the recommendations made before this Society at the meeting in 1906, that each society in some way best adapted to its own needs, adopt the recommendations of Dr. McCormack in organizing special work in each society. The details and directions can easily be left to those in authority in the society. No one can appreciate more the advantages to be derived than those who have already arranged and introduced the subject in their society. Atlantic and Salem Counties, to my personal knowledge, having adopted the suggestions, are greatly pleased with the results.

The Council would further report that they have considered the excuses offered by Dr. James Douglas, of Morristown. These excuses were sent to the Council, but never reached their destination, in consequence of which Dr. Douglas was last year dropped from the roll of permanent delegates. The Council would recommend that, if possible, Dr. Douglas be reinstated as a permanent delegate from the county of Morris.

Respectfully submitted.

PHILIP MARVEL, *Chairman.*

Moved and seconded that the report be received and its recommendations concurred in.

Dr. Marcy: Dr. Iszard's motion that the report of the Judicial Council be received and its recommendations concurred in is before the house. It is not possible to adopt all of these recommendations at once; therefore, it will be better to divide the motion. The Chair will entertain a motion that the report be received.

Motion made and carried.

Dr. Chandler: I should like very much to second the adoption of the last recommendation. I am much in sympathy with Dr. Douglas. I feel that he has been dropped through no fault of his own. He

sent excuses, which did not reach the Council. His name was reported as having sent no excuse; and, according to our by-laws, he was dropped. It is a question which the Society should consider well before deciding. The case will stand as a precedent.

Dr. ————: I should like to ask whether, his name having been dropped, there has been a recommendation of some other person to fill the vacancy.

Dr. Marcy: The Secretary can inform you.

Dr. Chandler: They have selected no nominee, as their quota is full.

Dr. Johnson: I move that Dr. Douglas be reinstated, as a permanent delegate, from Morris County.

Motion carried.

The amendments to the by-laws were then passed to a second reading.

Dr. Marcy: A motion to lay on the table is in order.

Dr. Chandler: I move that the amendments to the by-laws be laid on the table for one day.

Seconded and carried.

Dr. Marcy: Is there any further miscellaneous business?

Dr. Chandler: I have here the resignation of Dr. W. B. Johnson, a permanent delegate to the Medical Society of New Jersey:

"To the Medical Society of New Jersey:

"I hereby tender by resignation as a permanent delegate to the Medical Society of New Jersey representing Passaic County.

"(Signed) WALTER B. JOHNSON.

"June 25, 1906."

Moved and seconded that the resignation be accepted. Carried.

Dr. Marcy: A motion to adjourn the House of Delegates is in order.

Moved and seconded that the House of Delegates adjourn. Carried.

Adjourned at 4.15 P. M.

MEETING OF THE HOUSE OF DELEGATES.

Wednesday, June 26, at 3:15 P. M.

The report of the Nominating Committee was read by Dr. D. C. English, the Secretary of the Committee, as follows:

The Committee met June 25th at 5 o'clock P. M. Dr. Luther M. Halsey was elected Chairman, and Dr. D. C. English, Secretary. After the presentation of candidates for the various

positions the following were unanimously nominated:

President—DR. EDWARD J. ILL, Newark.

First Vice-President—DR. DAVID ST. JOHN, Hackensack.

Second Vice-President—DR. BENJ. A. WADSWORTH, Salem.

Third Vice-President—DR. THOMAS H. MACKENZIE, Trenton.

Corresponding Secretary—DR. DANIEL STROCK, Camden.

Recording Secretary—DR. WILLIAM J. CHANDLER, South Orange.

Treasurer—DR. ARCHIBALD MERCER, Newark.

Councilors—First District, DR. THOMAS W. HARVEY, Orange; Second District, DR. JOHN L. LEAL, Paterson; Third District, DR. WILLIAM A. CLARK, Trenton; Fourth District, DR. WILLIAM H. ISZARD, Camden; Fifth District, DR. PHILIP MARVEL, Atlantic City.

Committee on Publication—DR. CHARLES J. KIPP, Newark; DR. ELLIS W. HEDGES, Plainfield.

Committee on Scientific Work—DR. ELIAS J. MARSH, JR., Paterson.

Committee on Program—DR. F. F. C. DEMAREST, Passaic.

Committee on Public Hygiene and Legislation—DR. LUTHER M. HALSEY, Williamstown; DR. HENRY H. DAVIS, Camden.

Committee of Arrangements—DRS. DANIEL STROCK, Chairman, Camden; PAUL M. MECRAY, Camden; JAMES MECRAY, Cape May; ENOCH HOLLINGSHEAD, Pemberton; VIRGIL M. D. MARCY, JR., Cape May; HARRY A. STOUT, Wenonah.

Delegates to the American Medical Association—DRS. CHARLES P. KIPP, Newark; C. R. P. FISHER, Bound Brook. Alternates—DR. F. D. GRAY, Jersey City; W. S. LALOR, Trenton.

Delegates to the New York State Medical Society—DRS. W. J. CHANDLER, South Orange; WILLIAM ELMER, Trenton; D. C. ENGLISH, New Brunswick; P. A. HARRIS, Paterson; B. D. EVANS, Morris Plains.

To the Pennsylvania State Medical Society—DRS. W. B. STEWART, Atlantic City; H. A. STOUT, Wenonah; W. E. DARNALL, Atlantic City; L. M. HALSEY, Williamstown; ALEX. MCALISTER, Camden; D. BENJAMIN, Camden.

To the Massachusetts State Medical Society—DRS. N. L. WILSON, Elizabeth; G. K. DICKINSON, Jersey City; E. B. SILVERS, Rahway; JAMES HUNTER, JR., Westville; J. P. HECHT, Somerville.

To the Rhode Island State Medical Society—DRS. CALVIN ANDERSON, Madison; F. W. PINNEO, Newark; W. H. SHIPPS, Bordentown.

To the Connecticut State Medical Society—DRS. S. A. HELFER, Hoboken; A. L. ELLIS, Metuchen; A. L. STILLWELL, Somerville.

To the Maryland State Medical Society—DRS. H. G. NORTON, Trenton; W. G. SCHAUFFLER, Lakewood; EMMA M. RICHARDSON, Camden.

To the Southern Surgical Association—DRS. EMERY MARVEL, Atlantic City; F. M. DONOHUE, New Brunswick; PAUL M. MECRAY, Camden.

To the New Jersey Pharmaceutical Association—DRS. H. L. COIT, Newark; F. M. CORWIN, Bayonne.

The Committee makes the following recommendations:—

That the President be empowered to appoint, as delegates any members of our Society who shall signify their willingness to attend the annual meeting of any medical organization not specified above.

That the next annual meeting of the Medical

Society of New Jersey be held in the Hotel Cape May, Cape May City, and that the time of said annual meeting be June 23, 24, 25, 1908.

Respectfully submitted,

L. M. HALSEY, Chairman.

D. C. English, Secretary.

Long Branch, June 26, 1907.

Moved and seconded that the report be received. Carried.

Moved and seconded that the Secretary be authorized to cast a ballot for the election of officers, committees and delegates, there being only one nominee for each place. Carried.

Dr. English:—That does not carry with it the recommendations; only the election of the nominees?

Dr. Marcy:—It does not include the recommendations.

The ballot was cast, and the officers, delegates and committees as above named, were declared elected.

The recommendations of the committee were then read by Dr. English.

Moved and seconded that the first recommendation be adopted. Carried.

Dr. English:—The next recommendation is that the next annual meeting of the Medical Society of New Jersey be held at the Hotel Cape May, Cape May, June 23, 24 and 25, 1908.

Moved and seconded that this recommendation be adopted. Carried.

The report of the Committee on Hygiene and Legislation was read by Dr. Halsey, the Chairman of that Committee.

To the Medical Society of New Jersey:

Your Committee on Legislation beg to make the following as a report of their work during the past year, and with it a synopsis of what we were able to accomplish, and what legislation we succeeded in putting a check upon. While all of us invariably fall below our ideals, we are satisfied that the work during the session of 1907 has not been in vain, as we were able to prevent the passage of any osteopathic measure, and at the same time to explain the vicious character of the legislation demanded by the osteopaths; that we are sure that many members are thoroughly convinced that the passage of any bill which would give the osteopaths the right demanded, would be a decided retrograde movement and a step backward in the progress made by New Jersey in establishing a high medical standard.

We wish to take this opportunity to personally thank Senator Frelinghuysen for his untiring devotion to the interests of the medical profession of the state. At the conference held in the summer of 1906 the Senator placed his services at the disposal of the profession, and informed the Chairman of your Committee that he would introduce any measure which we advocated and oppose any bills which might be introduced which were detrimental to the best interests of the physicians of New Jersey. So loyally did he carry

this out that when your Committee called upon the Senator, after a conference with the osteopaths, and informed him that we were willing to make certain concessions recognizing their cult, the Senator very decidedly informed us that if we proposed for one moment to give the osteopaths the right to issue birth and death certificates that we might look for some one else to be our sponsor in the Legislature, as he would not be a party to anything which lowered the high standard of medicine in New Jersey to-day, and which ultimately might have a very great effect upon humanity at large. Such a man would be an ideal Governor of the state from a medical standpoint; we know that he would always be a strong bulwark to prevent the enactment of many vicious measures which are annually introduced into the Legislature. We all should be proud that we have such a man who is broad minded enough to see that the medical profession is laboring for the best interests of humanity.

We have now upon the statute books of the state of New Jersey a Pure Food Act which is almost identical with the National Pure Food measure, and while it is not perfect, and is susceptible of several changes which will materially strengthen it, yet we think all should feel proud of its passage, and the Senator from Somerset county should have unstinted praise for his exertions in placing this measure upon the statute books of the state.

Your Committee arranged with the legislative committee of the New Jersey State Pharmaceutical Society to meet in Trenton to take up the matter of a Pure Food Law—inviting the representative of the State Board of Health to be present so that in the construction of the bill all points could be covered, and not conflict with the laws already upon the statute-books. A representative of the Attorney General's office was also present. The matter was discussed in general and a plan mapped out, and a meeting called for a certain date. At the meeting we found that the matter had entirely been taken out of our hands, and the Attorney General's representative had constructed a bill along the lines laid down by the State Board of Health to which the State Pharmaceutical Society took many objections, and from that fact we believe responsible for a better bill than the present one not being on our statutes. At the same time bringing to their aid the different manufacturers of food products, they believing in their judgment some practical men should be added to the Board of Health along these lines for the better protection of the public and all concerned.

It gives to any association of three or more physicians in any county of the state, who will give sufficient bonds, the right to unclaimed bodies except those of strangers for the purpose of dissection.

The expense of the transfer of these bodies is to be borne by the association and not by the state. These associations may get material from adjoining counties in case no society exists there, and if two or more societies exist in one county they must take their turn in receiving material.

Several other bills of minor importance were looked after by your Committee, and some bad measures were disposed of in Committee, but the main work of the session has been devoted to the Osteopath Bill and the passage of the Pure Food Act.

Your Committee felt from reports that came to them that there was a possibility of our work

being very light, owing to the fact that information was received that the osteopaths did not propose to make any fight for legislation during the year 1907. This information was entirely wrong, as in February they introduced a bill into the Senate, known as Senate Bill No. 146. This was referred to the Committee on Miscellaneous Business, the chairman of which committee was very favorable to the bill. So rapidly had they intended pushing this measure that a time was set for a hearing, and no notice given to the medical profession, it being purely accidental that the day set for a hearing was found out. * * * * *

Strong pressure was brought to bear upon Senator Brown to postpone the hearing until such a date that we would be able to have a good representation of the medical profession in opposition to it. Each County Medical Society was notified to bring all the pressure they could to bear upon their Senators asking for the postponement of the hearing, and if possible to have the bill disposed of in committee. At the hearing our side was represented very ably, and the osteopaths had a good representation. We were informed by Senator Brown that he was in favor of either reporting the bill, or having the medical profession and the osteopaths hold a conference and decide upon a substitute, which measure he would report and use his exertions to have passed by the Senate. We continued to bring all the pressure to bear we could upon Senator Brown not to report the bill, and owing to the fact that the osteopaths made frequent unreliable statements to him, he decided to hold off for a time and not report the measure.

The osteopaths, finding that their game was blocked for a time, suggested that a conference with the Committee on Legislation would be agreeable to them. The conference was called, and a bill was offered by the medical profession which made all the concessions to the osteopaths which we felt that we could do, but they refused to accept. This bill, Senate Bill No. 302, was introduced by Senator Frelinghuysen and referred to the Committee on Miscellaneous Business. Senator Brown then refused to report either No. 146 or No. 302.

Notwithstanding the fact that the osteopaths had made a positive promise to your Committee that they would take no steps towards any legislation until their answer had been given to the committee as to the acceptance or non-acceptance of Senate Bill No. 302, they immediately introduced into the House, through Mr. Lane of Essex, House Bill No. 469, which was referred to the Committee on Miscellaneous Business and reported favorably by Chairman Tumulty. On second reading we succeeded in having this bill so amended that it was not at all acceptable to the osteopaths, and finally they abandoned it altogether. They were not willing to accept any measures which did not give them all the rights and privilege of physicians in the matter of birth and death certificates and in the general supervision of public health, and all the rights which are now held by regular licensed medical men in the matter of contagious and infectious diseases; showing plainly that it was not their desire to be legalized as osteopaths and to prevent the practice of irregular practitioners of that cult, but that they wanted all the rights and privileges of physicians without being subjected to the same regulations. This we have been fully familiar with for a long time, but their argument has been that they wanted to raise to a higher plane

the practice of osteopathy, and to keep men from practicing in this state who were graduates of correspondence schools and schools giving a very limited course. * * * * *

The Committee on Legislation then had a bill introduced in the Senate by Senator Frelinghuysen, known as Senate No. 354, and referred to the Committee on Militia, of which he is chairman. This was quickly reported, and owing to a slight technical error which was discovered by Senator Avis, it was passed on third reading by vote of twelve to seven. That it may be of assistance to us in the future, I will give a list of those voting for and against our bill in the Senate:

For—Avis, Bradley, Frelinghuysen, Cornish, Gebhardt, Hillery, Hinchliffe, Minch, Plummer, Price, Robbins, Shinn.

Against—Ackerman, Brown, Colby, Hand, Hutchinson, Lee, Silzer.

Absent—Minturn. (He would have voted with us if he had been present.)

Present, but not voting—Wakeley.

This bill was immediately sent to the House and was referred to the Committee on Miscellaneous Business, and notwithstanding that we had the positive assurance of the chairman and the majority of the committee that the bill would be reported as passed by the Senate, this was not done. Very positive evidence is in the hands of your committee that this bill was stolen by two politicians from Essex county and disposed of. * * * * *

Your Committee worked very hard at this session in trying to pass a measure which would be acceptable to the medical profession of the state, but owing to the fact of the two houses of the Legislature being of different politics, and that an active canvass of the members in the upper part of the state had been made by the osteopaths, we were satisfied that it would be a very difficult matter to enact any legislation which would be acceptable to them.

It is only more convincing to your Committee, and impresses the fact more favorably upon us, that there must be more hearty coöperation of the medical profession in the future. If one hundred osteopaths can succeed in so impressing the members of the Legislature that they should be recognized and have practically all the rights and privileges of physicians, what would we not be able to accomplish with almost four thousand members, if the same energy was used by us all.

Owing to the fact that your Committee was instructed by the State Society at its last session to fight the osteopaths to the bitter end, and not to make any concessions whatsoever, we were somewhat hampered in developing a plan of campaign which would result in some good.

At a conference in which practically every County Medical Society in the state was represented, it was decided to introduce a bill which was known as Senate Bill No. 302. This bill was drawn by a lawyer employed by the Union County Medical Society, and with some minor changes was adopted, practically unanimously by those present, and offered to the osteopaths in good faith. * * * * *

As your members of the Legislative Committee are on the field of action and have made a careful and close study of the conditions which are present, they should be given entire charge of all matters of this character. It is necessary to act quickly on matters which are pending, and if

left to a conference an opportunity to accomplish results would be lost.

* * * * *

At this session of the Society the term of the Chairman of the Committee on Legislation expires. He wants the Society to feel perfectly free to elect any one to take his position. He has labored to the best of his ability to thoroughly organize the state, and while much has been accomplished it has fallen far short of the standard which he established. In all probability there is some member of the Medical Society of New Jersey who would be able to develop more enthusiasm and get a greater amount of concentrated work and action from the several county medical societies.

While the Chairman feels that there is a duty which he owes to the Medical Society of New Jersey for the repeated honors which they have bestowed upon him, honors which he feels at times have hardly been justified, and for which he is willing to labor and do all that is possible for the unification of the medical profession, yet he does not feel that it would be right to stand in the way of other men in the state who may have much greater ability, who would be perfectly willing to devote their time to the service of our noble profession and who will be recognized.

The Committee on Legislation have some recommendations for your consideration: That in the future the Committee should be composed of four, or at the most five members, with the adjunct of the Auxiliary Legislative Committee. If the committee is larger, it is likely to be unwieldy. They should have full power to act for the State Society in all legislative matters. We further suggest that it would be well for each County Medical Society in the state, either through their Committee on Legislation or a special committee appointed for that purpose, to take up the work of educating the public at large as to the absolute necessity of physicians having the entire supervision over medical and sanitary matters. Their unselfish devotion to the eradication of diseases in the past is positive evidence of their good intent for the future. By timely articles in the newspapers, by lectures delivered by some of the members of the county societies or persons whom they may select, to which the public are invited, much will be done towards changing the sentiment throughout the state.

* * * * *

As there are so many emergencies which arise that call for speedy action, it is absolutely necessary in our judgment that your Committee should have unlimited power to do what they deem best in any emergency. You may rest assured that nothing will be done that will be derogatory to the profession.

* * * * *

Senate Bill No. 83 was passed by both houses and signed by the Governor and is now the law.

A loyal supporter of the medical men of this state, Dr. Edw. E. L. Haines, will this year retire from the Legislature. Through his exertions more than any other one man we were able to control vicious legislation at the 1906 session of the Legislature. In many counties there are medical men who are thoroughly capable of filling the position as members of the Legislature, and we would suggest that this matter be taken up by the different County Medical Societies looking to the possible making of several members of the medical profession for the com-

ing session of the Legislature. If we have several physicians in the Legislature their advice will be sought, and they will be able to help control many bad measures which are introduced.

The Chairman of the Committee wants to personally thank his associates for the untiring assistance which they have given him during the past year. We have been an exceedingly harmonious body, and have worked together for what we deemed the best interests of the medical men of New Jersey.

The Chairman of the Committee desires to express his thanks to Dr. Henry H. Davis for his work as Acting Chairman of this Committee during sickness of the Chairman. He acted for him at hearing before the Senate committee. He was present frequently at Trenton and was very earnest in upholding the medical society of the state and in looking after all matters in which we were interested. Doctors F. D. Gray, William H. Schauffler and A. K. Baldwin did heroic work for the committee.

We would fail in giving honor where it is due if we did not mention the work of Drs. John W. Bennett and John J. Baumann for the State Board of Medical Examiners.

To the counties of Union, Hudson, Somerset, Camden, Burlington, Atlantic and Gloucester a special acknowledgement is made for the very great assistance they have been to the Committee on Legislation. These, in our judgment, should be placed on the roll of honor, and if they are published in the JOURNAL of our Society it may go far toward stimulating others to follow their example.

* * * * *

Dr. F. D. Gray, of Jersey City, was unfailing in his exertions to accomplish certain results in Hudson county.

The Chairman wishes to personally thank the members of the medical profession in the state for the confidence which they have reposed in him. Let us all determine that another year we will do better work; we will have more systematic and thorough organization; we will let it be known throughout this broad land of ours that the Medical Society of New Jersey has the best and most thorough organization in the United States.

Moved and seconded that the report of the Committee on Hygiene and Legislation be received. Carried.

Dr. Dowling Benjamin, Camden:—I would move that the committee be empowered to use its best judgment in conducting the legislative interests of this Society, without any instructions from the Society during the coming year.

Motion seconded.

Dr. Benjamin then spoke at some length in support of his motion.

Dr. Marcy:—I shall ask Dr. Benjamin to re-state his motion.

Dr. Benjamin:—It is that the Committee on Hygiene and Legislation be uninstructed.

Dr. Henry Mitchell, Asbury Park:—Before taking action on this motion, I would state that this matter has been discussed by

the Board of Trustees. I hope Dr. Kipp will be good enough to communicate the action of the Board.

Dr. Kipp:—The Board of Trustees, at their meeting last evening gave the committee comparatively full power. An advisory board was appointed and, with this board, the committee can take counsel at its discretion.

Dr. McLaughlin:—Do I understand that the Board of Trustees gave the Legislative Committee full power in this matter?

Dr. Marcy:—They are uninstructed so far as it pertains to legislation. There is an advisory committee appointed from the Board of Trustees; if any radical changes are proposed in the medical acts, the Committee on Hygiene and Legislation is to advise with the committee from the Board of Trustees.

The motion was then put and carried.

Dr. A. K. Baldwin, of Newark, spoke in high terms of Dr. Halsey's labors and also praised the persistency and fidelity of the osteopaths in their efforts to get their bill through. He thought that their example should stimulate us to equal them in that respect.

At the suggestion of Dr. Godfrey, Dr. Vander Veer, of Albany, was requested to state what they had done in New York in regard to this matter.

Dr. Vander Veer reviewed the history of medical legislation in New York for many years, and then stated what was done last winter, as follows:

"Our State Medical Society, through its committee on legislation, then formulated the one-board bill, representing the allopaths, homœopaths and eclectics. Our State Society gave the committee on legislation full power to manage that bill as they then thought best, just as you have done to-day. We formulated a bill that would give us one board of State medical examiners, composed of nine members. About fifteen years ago, when the State board was organized, we were obliged to establish three State boards. Ten or twelve years ago our bill was amended, so that we got a most excellent interpretation of the practice of medicine, but when we brought the amendment through, that sentence disappeared. We did not discover its absence until the legislature had adjourned and could not put it back.

"The new definition of the practice of medicine in our bill this year has told the osteopaths very plainly that they could not be made doctors, and could not practice med-

icine. If they were to get anything at all, they found they would have to get it through the one-board bill—an interpretation of their standing in keeping with what we believe to be the right thing. This is the sum and substance of our bill:

"The definition of the practice of medicine with relation to osteopathy shows that those osteopaths in the State must exhibit evidence of having attended in one of their own colleges a two or three years' course of study in anatomy, physiology, chemistry, obstetrics and one or two other subjects. That evidence must come before the board of regents and be acted on, as with any other boards. The osteopaths must educate their students in a four years' course of six to nine months each year, precisely as our students are educated up to the point of therapeutics. This subject is left out entirely. If, after the first of August, 1907, their students can show evidence of having attended a four years' course in these branches (graduating in 1911), they come before the one board and pass in everything but therapeutics. They then get the degree of D. O., doctor of osteopathy, and must put it on their signs. They can not practice medicine or do anything but what they claim they want to do, be doctors of osteopathy.

"The bill received the most bitter opposition from the homeopaths. They did not help us in any way. We said, 'We are going to have this one-board bill.' They said, 'We will defeat it, if we can.' We believe that we have done the wisest thing in settling the matter as we have.

"This gives us one board of medical examiners. As we look back and see our position of three years ago, when we had in our legislature a bill to establish a board for examining and licensing osteopaths, the same for Christian Scientists, one for hydropathists, and one for vitapaths—four bills—we can congratulate ourselves. The other three bills have been held in abeyance, in the hope that the osteopaths would get theirs through. Then these three also would come up. We believe that the one-board bill will defeat the attempt to pass the others, and will give the best results."

Dr. Henry H. Davis expressed his appreciation of the services rendered by the few members who went to Trenton last winter to aid the committee. He also stated "that the osteopaths in this State could accomplish nothing if the medical profession of the State were to take the same interest in legislation that this small band did.

its members, and that, before the State Medical Society assumes to protect any doctor in any part of the State, the request to do so should come through a vote of the county or district society. I would offer as an amendment to the recommendation contained in the report the following: "Provided the application be made by a majority vote of his county society."

Dr. E. W. Hedges, Plainfield:—There are three reasons why the bill does not appeal to me: First, on account of the delay that would be encountered, which might be fatal to the case (there is so much red tape); second, because, if it were adopted, our treasury would soon be depleted of funds, supposing that lawyers would charge this society as much as they charge laymen, and, third, because if it were shown that a physician was being defended by a lawyer employed by his brother physicians, it would prejudice him in the eyes of the jury. They would say: "These doctors are banded together to cheat the poor when they make mistakes." The public would believe this, and the doctor that stood on that platform would be defeated. A much better plan, if a physician wants to be protected, is for him to insure in an outside company. There is one consideration that I should like to call your attention to, and that is whether the expenditure of money in this way is not forbidden by the by-laws of the Society. If I recall correctly, they forbid the expenditure of money except for the work of the Society.

Dr. Chandler:—I think that the committee are certainly entitled to thanks for the time and thought they have given the subject. I cannot say that I am favorable to the adoption of the report, as I have not had time to consider it. I question whether it should not lie over until next year's meeting. All the remarks so far have been made in opposition to the report of the committee, but there are in it certain very favorable features. A great many persons ask, "What is the good of the State Society or the county society?" "What can they do for us?" This is one good that they could do for them. In the New York State Society they have a system of medical defense, and it has done a great deal for the upbuilding of the State and county societies there. I am not prepared to pass an opinion upon the report of the committee, and I would propose, as a substitute for Dr. Wilson's motion, that the report be received and referred to the Board of Trustees for their consideration and report. As to Dr. Hedges' statement that the

funds of the Society cannot be appropriated for this purpose, I would say that they can be so used if recommended by the House of Delegates and approved by the Board of Trustees.

Dr. Wilson:—I will not accept that amendment. I want to have it individual. I want the privilege of saying yes or no. I do not want the question referred to the Board of Trustees or any one else.

Dr. Godfrey:—I see no reason why we should not make use of our distinguished friend from New York, Dr. Vander Veer, in reaching a decision concerning this matter. This law has been in operation for some years in New York, and I ask that the privilege of the floor be given him to tell us what the Medical Society of New York offers for membership.

Dr. Vander Veer:—If you will bear with me just one moment, I will explain how it is in my State. The county society is the unit of the organization of the Medical Society of New York. The man elected a member of the county society is received as a member of the State society. The men who live in a certain county know the members of the county society and know whether they are qualified. They are elected to the county society, and the dues are one dollar a year. If we want to entertain any one or indulge in any other extra expense, we must pass around the hat. We do not take out from the funds of the society any money for a banquet or anything of that sort.

The man who becomes a member of our State society from the county society pays an additional fee of three dollars, and has then to pay four dollars a year. What does he get from the State society? He gets protection in all malpractice suits; he gets the *New York Medical Journal*, and he gets a directory that comprises the names of all the physicians in New York, New Jersey and Connecticut. He gets for four dollars these three important considerations. It stimulates a man to become a member of the State society by giving this amount of protection.

The system has worked admirably. We pay no more than twenty-five hundred dollars to our lawyer, who is an able man. He sees that all the evidence is brought in, and from this evidence he decides whether he should go into court and join issue with the other party. All that the doctor has to do is to present the facts from his own standpoint.

Dr. Ambrose Treganowen, South Amboy,

thought that the "code of ethics" was sufficient protection for the physician.

Dr. George T. Welch, Passaic:—I want to second the amendment offered by Dr. Chandler. My reason for doing so is that this question is too important to be settled when men are in a biased and almost censorious mood. What grievances the gentleman on my right may have had against medical men in cases of that kind I do not know, but we ought to take the matter slowly and carefully. By putting it back into the hands of the Trustees for another year, for further digestion, we may ultimately do a great deal of good to the medical men of the State.

Dr. Wilson:—I will accept an amendment that the matter be laid on the table for a year.

Dr. English:—I agree with this. Lay it on the table for a year; publish it in the JOURNAL and send communications to the journals if you choose. Then, next year, take it up for action, when we have thoroughly considered the matter.

The motion, as amended "to lie on the table for one year," was seconded and carried.

Dr. Chandler:—I should like to present the report of the Board of Trustees on the amendments to the by-laws, which were referred to them. First, that suggested by Judge Garrison. They approve of its adoption. This amendment was then read:

For amendment see page 113.

Moved and seconded that this amendment to the by-laws be adopted. Carried.

Dr. Chandler:—I present another amendment, which has been twice read and tabled for one day, and which is to be added to Chapter XII of the By-Laws, as Section 3:

For amendment see page 113.

Dr. Wilson:—I should like to know what comes after that.

Dr. Chandler:—There are two other amendments. This is to be put at the end of Section I., of the same chapter:

For amendment see page 113.

Moved and seconded that both these amendments be adopted. Carried.

Dr. Chandler:—In Chapter IV, Section 2, first line, strike out "annual delegates" and insert "members."

Moved and seconded that this amendment be adopted. Carried.

Dr. English:—The amendment offered by Dr. Mercer has been approved by the Board of Trustees. In lines six and seven of Section 1, Chapter XII, strike out the words "one month before the annual meeting," and

insert instead thereof "two weeks before the beginning of the fiscal year." This change is necessary to bring this in line with the amendments you have adopted. It will read: "at least two weeks before the beginning of the fiscal year of the Medical Society of New Jersey," etc.

Moved and seconded that this amendment be adopted. Carried.

Dr. Senseman:—I move that Dr. Strock be allowed to read his paper, which was read by title this morning.

Dr. Wilson:—I hardly think that it would be courteous to allow this paper to be read until after the Vice-President's address.

Dr. Senseman:—Is it necessary to have the sanction of the House of Delegates to a change of program?

Dr. Marcy:—The House of Delegates has that power.

Dr. Wilson:—I will substitute for the motion that Dr. Strock be allowed to read his paper after the Vice-President's address.

Dr. Marcy:—The President decides that Dr. Strock may read his paper after the program of the afternoon is finished.

Dr. Mitchell:—Would a resolution be in order? If so, I have one to offer.

WHEREAS, Confusion has in numerous cases occurred in the records of this Society because of the custom heretofore prevailing in relation to the forwarding of the names of members of the component societies and the separate transmission of the annual dues to the Medical Society of New Jersey,

Resolved, That the component societies are hereby requested to cause all the annual dues to be transmitted to the Treasurer of the Medical Society of New Jersey through the hands of the *Secretary of said Society*, and that said dues be forwarded at the time when the list of members of the local Society is reported, as required in the By-Laws of the Medical Society of New Jersey.

Resolution seconded.

Dr. Mitchell: It may be necessary to explain the purpose of this resolution. It has been found by the secretary of the State Society that at times the list of members reported by the secretaries of local societies does not correspond with the list of dues received by the treasurer of the State Society from the treasurers of local societies, thus indicating that in some instances the dues of members of the local society have not all been paid. This confusion would not arise if all dues which have been paid were transmitted to the *secretary* of the State Society at the time when the list of names of members of local societies is forwarded. There ap-

pears to be nothing in the by-laws to prevent this change.

Resolution adopted.

A motion to adjourn was made, seconded and carried.

The House of Delegates adjourned at 4:45 P. M.

Dr. Marcy.—We should be both unappreciative and ungrateful if we did not recognize that the profession of Long Branch and its Board of Trade have been more than courteous to this Society. They have provided us with entertainments and shown us courtesies that are rather unusual. Therefore, I think that a vote of thanks should be extended to the local members of the Committee of Arrangements, particularly Dr. John W. Bennett, and to the Board of Trade of Long Branch for the hospitable manner in which they have entertained us.

Dr. English.—I would make such a motion; and, in doing so, I should like to make a remark concerning the difficulties that the local committee have had to contend with. Every allowance should be made for any shortcomings, because a change was made in the place of meeting quite late. Arrangements had to be made very quickly; there was little time to make them in. Under the circumstances, I think that the local committee and the authorities have done wonderfully well in the excellent provision that they have made for our convenience and pleasure.

The motion to extend a vote of thanks to the local committee and the authorities was seconded and carried unanimously.

A motion to adjourn was made, seconded and carried.

The House of Delegates adjourned at 4:45 P. M.

Thursday, June 27, 1907, 11.30 A. M.

Dr. Chandler.—The following permanent delegates, who have been absent from two consecutive meetings, are excused: William B. Graves and Thomas S. P. Fitch, of East Orange; William S. Jones, Camden; C. F. Adams, Trenton; Samuel Johnson, Asbury Park, and F. W. Flagge, Rockaway.

The number of persons present at this session is as follows: Fellows, 16; officers, 7; permanent delegates, 86; annual delegates, 39; associate delegates, 71; guests, 125. Total, 344.

I wish, just for a moment, to state the effect of some of the amendments passed yes-

terday, and of the resolution adopted. These amendments make the fiscal year begin with the 1st of June; and the reports that have been sent in one month before the annual meeting will be sent in one or two weeks earlier than that—two weeks before the 1st of June. It is important for the secretaries and treasurers of the component societies to keep this in mind.

A second point is that a newly elected or reinstated member is not in "good standing" in either state or county society until his dues to the state society have been paid to the state treasurer. Another point relates to the *method* of paying those dues. They are to be sent to Dr. Mercer *through the hands of the Secretary* (Dr. Chandler). In this way the Secretary can at once enter their names on his lists, certify them to the American Medical Association and then forward the check to Dr. Mercer.

Dr. Wilson.—Do I understand that the check will be sent to the Secretary, and that he will forward it to the Treasurer?

Dr. Chandler.—Yes. The check will be made out to the order of Dr. Mercer, will be sent to the Secretary, and he will pass it on to the Treasurer. The date of post mark will indicate when it was forwarded by the County Treasurer.

Dr. Enoch Hollingshead, Pemberton.—I move that the Secretary notify the county treasurers, so that they may be aware of this change.

Seconded and carried.

Dr. Marcy.—This very beautiful and useful gavel was presented to the Medical Society of the State of New Jersey by one of the instrument exhibitors.* I think that a vote of thanks should be tendered to this firm for this very pretty and exceedingly useful gift. It is not solid silver, but it answers every purpose.

Seconded and carried.

Dr. Marcy.—There was a matter referred by the Board of Trustees to the House of Delegates—a resolution that the Medical Society of New Jersey recommend to the Governor the names of gentlemen to be appointed to various institutions and boards. The Board of Trustees refers it back. No action has been taken.

Dr. Mitchell.—I move that it lie over for a year; because the meeting is now small, and this will allow of more discussion.

Seconded and carried.

Dr. Marcy.—I should like to thank you

* The Valzahn Co., 132 South 11th St., Philadelphia.

for the very courteous treatment that I have received. It has been a great pleasure to preside over the deliberations of this Society. I thank you, one and all. The house stands adjourned.

Adjourned at 11.35 A. M.

The following persons, whose names are recorded in the registration book, were present:

FELLOWS.—Charles J. Kipp, Newark; D. C. English, New Brunswick; John C. Johnson, Blairstown; John W. Ward, Trenton; H. Genet Taylor, Camden; George T. Welch, Passaic; John G. Ryerson, Boonton; O. H. Sproul, Flemington; William Elmer, Trenton; T. J. Smith, Bridgeton; C. R. P. Fisher, Bound Brook; Luther M. Halsey, Williamstown; J. D. McGill, Jersey City; E. L. B. Godfrey, Camden; Henry Mitchell, Asbury Park; W. B. Johnson, Paterson. Total, 16.

OFFICERS.—Alexander Marcy, Jr., President, Riverton; Edward J. Ill, First Vice-President, Newark; David St. John, Second Vice-President, Hackensack; Benjamin A. Waddington, Third Vice-President, Salem; Daniel Strock, Corresponding Secretary, Camden; William J. Chandler, Recording Secretary, South Orange; Archibald Mercer, Treasurer, Newark. Total, 7.

PERMANENT DELEGATES.

Atlantic County.—William B. Stewart, Edward A. Reiley, J. Addison Joy, Edward C. Chew and Emery Marvel, Atlantic City.

Bergen County.—Henry C. Neer, Park Ridge, and Samuel E. Armstrong, Rutherford.

Burlington County.—Enoch Hollingshead, Pemberton, and Walter E. Hall, Burlington.

Camden County.—Duncan W. Blake, Gloucester; Daniel Strock, William H. Iszard, William A. Davis, Harry H. Sherck, Alexander McAlister and William S. Jones, Camden.

Cumberland County.—Joseph Tomlinson and Ellsmore Stites, Bridgeton.

Essex County.—Charles Young, Joseph Young, George R. Kent, Aaron K. Baldwin, L. S. Hinckley, Henry L. Coit, Theodore W. Corwin, Richard G. P. Dieffenbach, Joshua W. Read, George A. VanWagenen, James T. Wrightson, Theron Y. Sutphen, Charles F. Underwood, L. Eugene Hollister, Charles D. Bennett and Robert G. Stanwood, Newark; William J. Chandler, South Orange; David E. English, Millburn; George B. Philhower, Nutley; William B. Graves, East Orange, and Thomas W. Harvey, Orange.

Gloucester County.—George E. Reading, Woodbury; James Hunter, Jr., Westville, and Eugene T. Oliphant, Bridgeport.

Hudson County.—Gordon K. Dickinson, Joseph M. Rector, George E. McLaughlin, Mortimer Lampson, John C. Parsons and T. R. Chambers, Jersey City; Fred M. Corwin, Bayonne; J. A. Exton, Arlington, and Samuel A. Helfer, Hoboken.

Hunterdon County.—W. S. Creveling, Valley.

Mercer County.—R. R. Rogers, David Warman, Elmer Barwis, Thomas H. MacKenzie, C. F. Adams, J. C. Felty and H. B. Costil, Trenton.

Middlesex County.—Ambrose Treganowan, South Amboy, and F. M. Donohue, New Brunswick.

Monmouth County.—Henry Mitchell and Samuel Johnson, Asbury Park; D. McLean Forman,

Freehold; Edwin Field, Red Bank; F. C. Price, Imlaystown, and Cyrus Knecht, Matawan.

Morris County.—Stephen Pierson, A. A. Lewis and B. D. Evans, Morristown; Levi Farrow, Hackettstown; F. E. Flagge, Rockaway, and Calvin Anderson, Madison.

Passaic County.—P. A. Harris, George H. Balleray, John L. Leal, C. H. Scribner and Andrew F. McBride, Paterson.

Somerset County.—S. O. B. Taylor, Millstone; J. P. Hecht and A. L. Stillwell, Somerville.

Sussex County.—Benjamin W. Ferguson, Beemerville.

Union County.—Alonzo Pettit, James S. Green, N. L. Wilson and T. N. McLean, Elizabeth, and Elihu B. Silvers, Rahway. Total, 87.

ANNUAL DELEGATES AND REPORTERS.

Atlantic County.—Theodore Senseman and E. S. Sharpe.

Bergen County.—Valentine Ruch, Jr.

Burlington County.—W. P. Melcher and William H. Shipp.

Camden County.—E. B. Sharp, Dowling Benjamin and Paul M. Mecray.

Cumberland County.—Amos J. Mander and H. G. Miller.

Essex County.—H. B. Epstein, H. F. Cook, Frank W. Pinneo, J. Henry Clark, Wells P. Eagleton, J. H. Bradshaw, Linn Emerson and P. B. Davenport.

Gloucester County.—Harry A. Stout.

Hudson County.—W. F. Faison, O. R. Blanchard and Harry B. Rue.

Mercer County.—William S. Lalor, Ira M. Shepherd and H. G. Norton.

Middlesex County.—Alfred L. Ellis.

Monmouth County.—W. P. Campbell and D. D. Hendrickson.

Morris County.—Henry A. Cossitt and John Walters.

Ocean County.—William G. Schauffler.

Passaic County.—Byron C. Magennis, Edward F. Denner, J. V. Bergin and Henry Kip.

Salem County.—W. L. Ewen.

Union County.—Thomas P. Prout, Thomas E. Dolan and J. B. Harrison.

Total, 39.

ASSOCIATE DELEGATES.

C. C. Beling, J. J. Broderick, H. H. Davis, John N. Bennett, William A. Westcott, J. C. McCoy, J. T. Welch, F. J. Keller, Josiah Meigh, George T. Tracy, J. L. Taylor, Harry E. Shaw, Harry B. Slocum, C. Garrabrant, Edward Guion, Rush Neer, J. G. L. Borgmeyer, Hamilton Vreeland, G. B. Gale, P. B. Rafferty, J. J. Baumann, J. S. Baer, Ellis W. Hedges, L. L. Mial, George H. Baker, A. E. Carpenter, Samuel F. Stanger, James J. Reed, V. M. Disbrow, E. J. Marsh, Jr., W. B. Jennings, W. W. Beveridge, J. H. Moore, E. M. Richardson, George F. Wilbur, F. W. Martindale, R. C. Barrington, E. S. Corson, D. H. Oliver, Joseph Stokes, Edgar B. Grier, Stephen T. Quinn, Fred S. Buckingham, Armin Fischer, T. N. Gray, J. D. Lippincott, E. E. Worl, Ed. M. Richman, F. A. Faison, A. Nelson, A. A. Strasser, H. J. Burnett, C. Loper, H. E. Lore, W. P. Glendon, Harold D. Corbusier, Ed. M. Beach, H. J. Wallhauser and Isaac S. Long. Total, 59.

Other associate delegates were present but it is impossible to decipher their signatures in the registration book.

GUESTS.

John B. Donges, John H. Musser, H. S. Houghton, William Martin, Albert Vander Veer, James Vander Veer, Morris Manges, Charles P. Noble,

William M. Leszynsky, Charles G. Garrison, H. M. Gesner, John B. Deaver, Howard A. Kelly.

The following Permanent Delegates were absent: William E. Darnall, R. H. Parsons, S. T. Day, H. C. Bleyle, Charles H. Bailey, Thomas S. P. Fitch, R. C. Newton, Edward Staehlin, R. P. Francis, F. D. Gray, I. S. Cramer, George N. Best, George H. Franklin, David Stephens, R. M. Curtis, W. H. James, Henry Chavanne, Mary E. Gaston, C. L. Lindley, B. W. Ferguson, T. H. Tomlinson and G. W. Cummins.

The following Permanent Delegates have been absent from two consecutive annual meetings: Isaac S. Cramer, Flemington; George N. Best, Rosemont; George H. Franklin, Hightstown; David Stephens, New Brunswick; Charles L. Lindley, Lakewood, and T. H. Tomlinson, Plainfield.

WM. J. CHANDLER, *Secretary*.

**Abstract of Minutes of the Scientific Sessions
of the 141st Annual Meeting of the Medical
Society of New Jersey, held in Long
Branch on June 25, 26 and 27, 1907.**

Tuesday, June 25, at 4.15 P. M.

Rev. George L. Dobbins, of Long Branch, delivered the invocation, and Mayor McFadden made the Address of Welcome.

The President announced that the members of the Nominating Committee would meet at five o'clock in the parlor of the hotel.

The first paper was by Dr. E. L. B. Godfrey, of Camden, on "The Legality of State Medical Examinations and Reciprocity in Inter-State Medical Licensure."

Dr. Godfrey said that the right of a state to demand that graduates of medical colleges shall pass a state board before being allowed to practice is based upon the police power of the state. It is one of the rights not vested by the Constitution in the Federal Government nor denied to the states. It could not be exercised by the Federal Government without an amendment to the Constitution. He also made a strong plea for reciprocity between states having nearly similar standards of qualifications.

In the discussion, Dr. William Perry Watson, of Jersey City, said that the existing medical law of New Jersey is second to none in any state, with one exception. Dr. Watson then gave the Society his idea of a perfect law of the kind.

Dr. Mortimer Lampson, of Jersey City, objected to a statement contained in Dr. Godfrey's paper, that there are three great medical schools; and he denied that medical examining boards had had any influence in

advancing the merits or standing of the profession.

Considerable discussion upon this point followed, which was participated in by Drs. Henry H. Davis, Dowling Benjamin and A. K. Baldwin. Dr. E. E. Worl said that it was very difficult to have persons violating this law punished. Dr. J. C. Felty, of Trenton, asked whether there were many colleges whose students the board refuses to examine. Dr. John W. Bennett, of Long Branch, said that this was true of about thirty per cent. of the medical colleges of the United States. He also remarked that no practitioner could state that the attention of the Board of Examiners had ever been called to anyone practising illegally, but that they had called the attention of the District Attorney to the matter. The law does not permit the Board to prosecute. He likewise claimed that the Examining Board does advance the profession by raising the standard and compelling the colleges to raise theirs in accordance with it. A discussion on the subject of illegal practice followed, participated in by Drs. W. A. Clark, of Trenton; Bennett, Eagleton and Worl. Dr. George H. Balleray, of Paterson thought it would be a good thing to have a National Examining Board.

Dr. Hawkes, of Newark, then read his paper on the Lymphatics, a brief synopsis of which appears on the program. The discussion on this was opened by Dr. Charles Young, of Newark, who considered the part played in the nutrition of the tissues by the lymphatics, and said that it seemed as if the lymphatic system had been especially designed as a protective agency of the body, carrying off waste and preventing the absorption of infective material. Dr. Norton L. Wilson emphasized the point that enlargement of the lymph-glands means bacterial infection. Dr. C. C. Beling, of Morris Plains, spoke further on this point, and said he had seen a case in which the inguinal glands enlarged sufficiently to produce thrombosis of the saphenous vein, but did not go to the point of suppuration. Dr. Gordon Dickinson spoke of the importance of the omentum to the surgeon, and the action of the lymphatics in cases of infection of the peritoneal cavity. Dr. Emery Marvel said that it was new to him to think of the lymph-channels as being efferent, and he had always viewed them as being afferent. He mentioned that recent investigations have shown that bacteria placed within the peritoneal cavity will reach the liver in fifteen minutes.

Tuesday, June 25, at 8:35 P. M.

I. ORATION IN SURGERY.—*Some Observations on Four Decades of American Surgery.*

Dr. Albert VanderVeer, of Albany, delivered the Oration in Surgery, reviewing the progress made in very many surgical procedures during the last forty years.

It was moved and seconded that the thanks of the Society be extended to Dr. VanderVeer for his most instructive and interesting paper. Motion carried.

It was moved and seconded that Drs. Deaver and Musser, with Drs. Manges and VanderVeer, be invited to sit with the Society and take part in the discussions. Motion carried.

2. ORATION IN MEDICINE.—*The Physician and the Medical Press.*

The Oration in Medicine was delivered by Dr. Morris Manges, of New York. His principal contention was that what is regarded as unfit for the body of a medical journal should be considered unfit for its advertising pages. He thought that articles regarding the newer drugs should be published for the information of physicians, but that manufacturers should be forbidden to reprint these for commercial purposes.

It was moved and seconded that the Association extend a vote of thanks to Dr. Manges for his very delightful paper. Carried.

Dr. J. S. Baer, of Camden, then read a paper on "When to Operate and When Not to Operate in Ruptured Ectopic Pregnancy." He said that, although it would be best to operate before rupture has taken place, this is not always possible; therefore, the question is when to operate after the rupture has been diagnosed. In answer, he said that in most cases one should operate as soon as the diagnosis is made; but that in some few cases, when there is profound shock, a little waiting will sometimes result in saving life. He reported six cases illustrating these points.

Dr. B. F. Baer, of Philadelphia, opened the discussion. He always operates whenever there is a tumor found in the pelvis, whether it is extrauterine pregnancy or not. It is often very hard to make a diagnosis in extrauterine pregnancy. In regard to what shall be done when the rupture has occurred and the patient is practically dead, Dr. Baer said that he has not the courage to operate in such circumstances. He believes that the patient will be saved more frequently if the

gynecologist waits awhile. He does not endorse the operation by vaginal section in extrauterine pregnancy.

Edward J. Ill, of Newark, the First Vice-President of the Society, thought that such cases should not be taken to a hospital, but should be attended to on the spot, no matter where it be. He also thought that no operation should be performed in cases of tubal abortion.

Dr. P. A. Harris, of Paterson, said that there are two things by which the general practitioner can diagnose ectopic gestation: a typical menstruation and pains. He should not accept a statement that it is probably a case of abortion without inquiring whether the fetus has been seen by any one.

Dr. G. K. Dickinson, of Jersey City, did not think that operation had ever hastened a death in extrauterine pregnancy. He believed in always operating, without waiting to transfer the patient to the hospital, and thought that the method of anesthesia afforded hope in patients that have lost a great deal of blood.

Dr. Emery Marvel, of Atlantic City, said that in conditions of shock, stimulation will benefit the vasomotor system, and can be given during the operation. Therefore, delay on that ground is unjustifiable.

Dr. J. M. Rector, of Jersey City, in tragic cases the blood-pressure will show the exact condition of the patient and how great from shock she is suffering.

Dr. J. W. Martindale, of Camden, said that he had recently had two cases in the tragic state of ectopic gestation. One was operated on and died, and the other was operated on and recovered. One cannot tell which case will recover and which will not, so one should operate in all cases. Collapse is a fainting condition, and fainting is nature's method to stop bleeding. If stimulation is applied, the bleeding will recommence; it would therefore be productive of more harm than good.

Dr. J. S. Baer, closing the discussion, said he did not believe in stimulation, except in a radical operation. He saved one patient, he believes, by intravenous infusion of salt-solution. He does not know in which cases waiting will save the patient, but feels that such cases exist. All his patients were out of bed sooner than if he had operated from below. He believes that the hematocele is absorbed in but a limited proportion of cases.

DIET IN PULMONARY TUBERCULOSIS.—By.
Dr. Theodore Senseman, Atlantic City.

The subject was considered under the following headings:

1. Not the amount of food ingested, but the amount assimilated, is the important consideration.

2. Improve digestion, and allow appetite to follow of its own accord.

3. There is a pivotal point in each patient's digestive ability, which must be ascertained.

4. This pivotal point is capable of being raised.

5. All tubercular individuals show evidences of digestive derangement. It is folly to attempt to make them do more work in this condition than they could in a healthy state. Stuffing a patient with solid food is, therefore, a mistake.

6. The diet that gives the greatest amount of nourishment and makes the least demand upon the digestive organs is the diet of choice. Raw eggs and milk meet these requirements.

7. Each patient has a normal weight, beyond which we should not endeavor to force him.

8. This normal weight attained, the smallest quantity of food that will enable him to maintain it is sufficient.

9. So long as this normal weight can be maintained, the patient has nothing to fear from tuberculosis.

Dr. D. E. English, of Milburn, felt sorry that Dr. Senseman had not laid more emphasis upon purgation. He favors three or four bowel-movements a day, to get rid of the waste products of the extra amount of food ingested. He adds a little water and salt to each glass of milk.

Dr. Fred M. Corwin, of Bayonne, said that the nutrition of the patient should be carefully watched from day to day, and that feeding should not be done in a routine manner.

Adjournment at 10:50 P. M.

Wednesday, June 26, at 10:50 A. M.

PREMATURE SEPARATION OF THE PLACENTA.
 —By *J. W. Martindale, M. D., Camden.*

The writer first described a fatal case of the kind that occurred in his practice during the last year.

He then quoted descriptions of cases seen by Dr. Coe of New York, and Dr. Wm. Nicholson, of Philadelphia, and refers to Dr. Goodell's paper published in the *Ameri-*

can Journal of Obstetrics in 1870. The condition has been ascribed to the hemorrhagic diathesis, nephritis, hydramnios, death of the fetus, short funis, and fatty and calcareous degeneration of the placenta. Its symptoms are a steady pain in the lower part of the abdomen, weak fetal heart sounds, irregularity of the uterine contractions, and a show of blood. Sometimes external hemorrhage is not noted. The hemorrhage is usually concealed until it reaches serious proportions. The differential diagnosis from colic is made by the absence of shock in the latter, the history of having eaten indigestible food, and the presence of constipation; from ruptured tubal abscess by the absence of a previous history of tubal disease and of localized tenderness over the tubes, and from rupture of the uterus by the fact that the condition comes on more gradually in detached placenta than in rupture of the uterus, and that the uterine tumor gets larger after the accident in detached placenta, while it gets smaller in rupture of the uterus.

The prognosis is very bad. The children almost always perish, and only vigorous women that receive prompt attention are likely to survive.

Dr. Martindale then discussed the treatment, the question being whether one shall wait or empty the uterus at once. After quoting the opinions of various writers, he declares that the latter gives the lowest mortality. The condition requires for its management a stout heart and prompt action on the part of the attendant.

Dr. H. H. Sherk, of Camden, who had been called by Dr. Martindale to see the case mentioned in his paper, gave some additional details of it, and then quoted some cases reported by Dr. Franks, of Louisville, Kentucky.

Dr. Charles P. Noble, of Philadelphia, said that every one that attends labor cases should post himself regarding premature separation of the placenta; because, though such cases are rare, the only salvation of the patient when they occur is that the physician shall act promptly and courageously. The consensus of opinion is that if, at the time the diagnosis of concealed hemorrhage is made, the cervix is sufficiently dilated for the application of the forceps, that treatment should be instituted. If not, a Cæsarean section should be done at once, provided there is available any one that can do it properly, but it should never be done by one that does not know anything about it.

SYMPOSIUM ON DISEASES OF THE GALL BLADDER.

Etiology and Pathology. H. G. Norton, Trenton.

Cholecystitis, which is nearly as frequent as appendicitis, is more difficult to diagnose and less amenable to treatment than other surgical diseases. It is thought to be most commonly caused by (1) microbic infection, (2) toxins, and (3) direct traumatism to the gall bladder. The microbic infections include septicæmia, pyemia, influenza, pneumonia and typhoid fever; the toxins arise from diseases of the alimentary canal, including typhoid fever and dysentery. Appendicitis is sometimes a focus for the spread of the infection to the liver and gall bladder. It may be direct extension from the duodenum, through the common and cystic ducts; or by way of the blood vessels, or both.

In general blood infection the micro-organisms may be excreted into the bile ducts or gall bladder from the hepatic artery and portal vein. That cholecystitis does arise from typhoid infection is proved by the finding of typhoid and colon bacilli in the gall bladder. It sometimes occurs years after the typhoid infection. The author has never seen a well-marked case of typhoid cholecystitis, but it does occur as a complication. The irritation of previous cholelithiasis may be the factor needed to produce cholecystitis as a complication of typhoid, acting either by obstructing the duct and causing distension; or by ulceration of the mucous membrane from pressure, thus affording an avenue of infection. More than one variety of germ may be found at the same time in the gall bladder. Suppurative cholecystitis is due to a further development of the causes of acute cholecystitis. The presence of gall stones in the gall bladder is probably a frequent causative factor of cancer, but gall stones are frequently present for years in cases in which no cancer develops. Primary cancer occurs without the presence of gall stones in twenty per cent. of the cases. Irritation from the gall stones in the gall bladder of a person predisposed to cancer probably produces cancer of the liver. Analogous to irritation by the gall bladder as a factor in causing cancer is the greater frequency of uterine and mammary cancer in multipara.

Diagnosis. - P. A. Harris, Paterson.

To make the diagnosis one should uncover the body of the patient and have the exact seat of the pain pointed out. Palpation, inspection and percussion should then

be practiced. The great progress in the understanding of visceral disease dates from the investigation of these cavities by the knife of the surgeon—autopsies *in vivo*, as they have been called, being particularly useful in the study of gall stone disease. In cholecystitis, it is the inflammation caused by the stones, rather than the stones themselves, that causes the symptoms. The commonest diagnostic symptom is colic. The pain does not always center over the gall bladder, although it usually does. The differential diagnosis is to be made from (1) lesions of the gall bladder, (2) ulcer and cancer of the stomach and duodenum, (3) appendicitis, (4) kidney stone or tuberculosis, and (5) pancreatitis. Under the heading of gastralgia may often be found a good description of gall stone colic. Jaundice does not appear when the seat of inflammation is limited to the gall bladder. Its presence is presumptive evidence of gall stone disease, but its absence would not disprove this diagnosis. The test of finding or not finding gall stones in the stools after the attack has only a restricted value.

Complications. G. K. Dickinson, Jersey City.

Until recent times, various conditions discovered in conjunction with diseased states were considered to be partially independent of the same, and were called complications; but recent betterment of knowledge has demonstrated that these are but an extension of the primary disease to other structures. Conditions leading to an extension of disease processes of the region under discussion are:

1. Receptive nerve states. The gall bladder region being supplied by filaments from the cerebral, spinal and sympathetic nervous systems, it is not to be wondered at that a person in great pain should have some disturbance in parts innervated by one or other of these.

2. Obstruction of the flow of bile, depriving the intestines of their accustomed fluid, on the one hand, and on the other, inducing dynamic and physiologic conditions by the failure of the bile to be discharged.

3. Conditions of tension. Bile is secreted under low tension, as compared with some other fluids. Consequently, alterations in the structure of the bile tract and liver induced through this condition will be slow of progress, and, according to whether the obstruction be steadily maintained or intermittent, there will be two distinct pathologic results.

4. Bacterial invasion, either ascending

from the duodenum or transmitted through the blood. Bile, not being bactericidal, will harbor germs for an indefinite time.

5. Inflammatory states in surrounding structures and their concomitants. Protective adhesions form with the omentum. This, if the inflammation be not too intense, may bring about resolution through phagocytic action. Adhesions between the neighboring organs may produce serious pathologic conditions.

6. Ulceration through calculi. The pressure of calculi may cause pressure necrosis or ulceration, and if adhesions form, calculi may pass through them to adjoining viscera.

7. Hyperplasia, or regular or irregular development. Hyperplasia of the mucosa produced by calculi impacted in the cystic duct may take on adenomatous changes, and eventually become a true adenocarcinoma.

Medical Treatment. J. H. Musser, Phila.

Dr. Musser said that the subject should not be the medical treatment of gall stones; but, rather, the medical treatment of that state of the liver and the ducts, including the gall bladder, on account of which there is a tendency to the formation of stones. There are many instances in which operation cannot be resorted to. Cholelithiasis is caused, on the one hand, by toxic influences; and, on the other, by alterations in the digestion producing modifications in the reflexes of the duodenal end of the stomach, and thus causing either a limitation or an increase of hepatic secretion. It may also arise from circulatory conditions of the liver secondary to heart trouble and from infection. Remembering these four predisposing conditions, one realizes that there is a large field for medicinal or hygienic therapy.

In a general way, then, it may be said that cholelithiasis demands hygienic treatment; removal or modification of the cause, so far as it can be brought about; and, further than this, the use of specific measures. In a number of cases, Dr. Musser has succeeded in probably lessening the number and severity of the attacks by having the patient wear a properly constructed bandage. In regard to the use of olive oil, Dr. Musser has seen no relief to the gall stones from its use; but sometimes there is a relief to the hyperacidity that usually accompanies gall stones. After its administration, the patient can nearly always exhibit pseudo-gall stones. The treatment of cholelithiasis is not merely the treatment of a local process, but is the broad general management of a man that is sick.

Surgical Treatment. John B. Deaver, Phila.

Dr. Deaver said that disease of the gall bladder, except the mild variety, is due to some form of infection. It shows itself in two forms: the calculous and the non-calculous. In both forms there are various grades of inflammation of the gall bladder. Adhesions of the upper abdomen are sometimes so thick that the liver is never seen during the operation for stone. These adhesions are the result of delay in surgical intervention under the guise of medical treatment. The physician should not delay until hope is gone and the surgeon becomes a last resort. The indications for immediate intervention are (1) complication showing the spread of infection, and (2) symptoms of obstruction of the common duct after a reasonable interval. Other conditions demand operation, but the necessity is not so urgent. The purpose of operation is to remove the inflammation, to remove the stones, and to prevent recurrence.

Dr. Deaver then described the technique of the operation. When the structures are not normal, the procedure becomes very difficult, and one should be a master of the anatomy of the upper abdomen. It is much wiser to drain outside of the abdomen than to allow the infectious bile to flow into the duodenum. The drainage should be left in until it has accomplished its purpose and is ready to drop out. The speaker deprecated the practice of what he termed meddlesome surgery, by which he had seen patients' recovery prevented. He does not mind, even should the drains remain in for six months. Dr. Deaver considered the diet, which should be restricted.

The variety of organism causing the symptoms calls for some discrimination in operative procedures. The symptoms of streptococcus infection are much more intense than those commonly seen in the staphylococcus.

Discussion opened by E. W. Hedges, Plainfield.

The discussion on the symposium was opened by Dr. E. W. Hedges, of Plainfield, who said that he would criticise Dr. Deaver for saying that he hesitated to take out the gall bladder under certain conditions. If the source of gall stones is nearly always in the gall bladder, why not take it out when you get the chance, and thus rid the system of the possibility of a recurrence? In support of this view, Dr. Hedges quoted Mayo, who has never seen an ill effect follow the loss of this organ.

Dr. Hedges said that the fact that ten per

cent. of the autopsies performed show gall stones and that one elderly woman in every four has gall stones have a direct bearing on the treatment of this condition. If they are common in women, it must be due to the retardation of the bile caused by tight lacing. When a patient complains of persistent nausea and vomiting or of recurrent pains in the epigastric region, one should carefully palpate the region of the gall bladder. Dr. Hedges then gave the diagnostic signs of gall stone disease. In making the differential diagnosis between an enlarged gall bladder and floating kidney or tumor of the omentum, one should get the finger up under the lower rib on the right side and have the patient take an inspiration. If the tumor ascends and descends with the respiratory movement, the case is one of gall stones.

Dr. Charles P. Noble, of Philadelphia, made a defense of the gynecologists against the usual slurring remarks of the general surgeons.

Dr. Vander Veer, of Albany, emphasized the question of the rôle of typhoid fever in the production of gall stones. He has found typhoid bacilli ten or twelve years after the attack of typhoid fever, and always takes this factor into consideration. He related a case of typhoid fever in which gall stone colic developed. The patient was operated on during the acute attack and recovered.

Dr. Vander Veer believes that there are certain cases that the medical man may treat successfully, but that most patients that think they are cured by this means are not, and finally have to be operated on. When there is great distension, he is suspicious of malignant trouble. In such cases he has done gastro-intestinal anastomosis and drained the gall bladder, and this made the patient comfortable for years. It is in that condition particularly that an exploratory incision is of benefit.

Dr. Vander Veer said that it is very difficult to get patients to give up the belief that olive oil does good in some cases. He believes that the gall bladder should be allowed to drain as long as it will, which will sometimes be as long as eighteen months or two years. If it goes longer, one should reopen the wound, when a useless sac that can be dissected out will usually be discovered.

Dr. Philip Marvel, of Atlantic City, referred to the intermediate class of cases, between the very grave, demanding immediate operation, and the very mild. These he classed as (1) those that are complicated

by other diseases previously to the attack, and (2) those that are complicated by diseases following the attack of gall stone infection. He asked whether in such cases it would not be better to operate.

Dr. Harris said that the reason he had not mentioned the steeplechase temperature as characteristic of the sepsis of gall stone disease was that the paper was addressed to general practitioners, who usually have no facilities for taking the temperature at short enough intervals to demonstrate this sign. Dr. Harris said that he thought Dr. Deaver had pretty well answered Dr. Marvel's question in reference to operating in cases with complications. He believed that Dr. Musser had given the general practitioner too much encouragement to employ medical treatment.

The next paper on the program, by Daniel Strock, of Camden, "Tetanus and Antitetanic Serum," was read by title. It contained his results in the use of very large doses of the serum (ten cc. every two hours), by which he was able to cure three out of five well-developed cases of tetanus.

The last paper, "The Significance of Blood Pressure," etc. (see program), was also read by title.

Wednesday Afternoon.

Dr. Marcy's address was devoted to a consideration of the following points: (1) How can we elevate the standing of the medical profession in the community? (2) What is its moral responsibility? (3) What is its duty regarding some of the evils that threaten our body politic? His recommendations were: (1) A four years' course, followed by a year in a hospital before the degree is conferred, a re-examination every five years, and a comprehensive plan of post-graduate work. (2) That the members be well developed morally, with the highest ideals, and characters above reproach. (3) That the profession should use their best efforts to create a sentiment among the people against the use of liquor, and that it should report every case of abortion to the prosecuting attorney.

Dr. Waddington's paper was a comprehensive review of the history of our knowledge on the subjects of bacteria, together with their toxins and antitoxins, in many different diseases. He especially emphasized diphtheria antitoxin, and concluded that it is fair to assume that as within the past generation such marvelous progress has been made in establishing medicine on a scientific

basis, ensuing generations will have a still greater inheritance to leave to posterity.

HOW FAR MAY THE GENERAL PRACTITIONER EMPLOY AND BENEFIT FROM LABORATORY METHODS OF DIAGNOSIS.—*By Robert N. Willson, M. D., of Philadelphia.*

Internal medicine includes, primarily, an accurate diagnosis, a very little therapeutics, abundant intelligence and common sense, and every scientific method of diagnosis and treatment that can be proved to be practical and available for general use. No condition can be diagnosed completely and exclusively by means of older methods or by the new. Every known aid to accuracy must be utilized. Laboratory methods are useful and necessary in the study of disease. Without them, no study has been even part way thorough. If the general practitioner will devote to scientific medicine the odd minutes often spent over a glass or a cigar, he can save an hour out of the twenty-four. An additional hour may often be secured after his family have retired to rest. If he is too busy, he should have an assistant upon whom he can depend for accurate and prompt laboratory reports. Beginners in practice are very glad to get such work to do. They should send in their own bills, as the best means of preserving their identity. Laboratory methods can be used by the well-equipped physician as a means of dignity and self-support. Laboratory medicine has opened up a new field for the young and poor man. As he grows older it will be a comfort to him as a clinician to be able to control by first knowledge the work of his laboratory men. The family doctor has not gone, and will not go, and the specialist is here to stay. The laboratory enthusiast is another fixture. In all these classes one will occasionally find the physician who scorns no method and flouts at no school; who executes his own work perfectly, so long as it is a possible thing, and then enlists the aid of younger men, whose untempered science finds its complement in his own mellow judgment and ripe experience.

Dr. Marcy opened the discussion. He said that while it is easy for the laboratory worker and the clinician to coöperate in the city, it has not until now seemed feasible in the rural districts. It has now, however, become absolutely necessary for the country doctor to avail himself of these scientific and accurate methods. Dr. Marcy suggested that the country practitioner should take a post-graduate course of study at a medical school, and should keep in touch with

progress by means of current medical literature. Each community should have some one man that is competent to attend to laboratory investigations and willing to devote his time to them. The county medical society should be the center of graduate medical work and study, as well as for the diffusion of a knowledge of the recent discoveries and latest practical methods of treatment.

Dr. H. A. Cossett, of Morris Plains, said that it is surprising to find that some of the specimens sent for laboratory examinations are received with absolutely no history to go by. Specimens of blood are sent on a piece of glass a quarter of an inch thick, and all dried up. No wonder that laboratories cannot get out the reports that they would like.

Dr. Marvel thought Dr. Willson's suggestions quite practicable.

Thursday Morning.

The first paper, "Symposium on the Eruptive Diseases," was read by title, in the absence of its author. The first paper in the symposium was on "Scarlet Fever," by Dr. Hiram Williams, of Passaic.

SYMPOSIUM ON THE ERUPTIVE DISEASES.

Scarlet Fever. Hiram Williams, Passaic.

The writer stated that scarlet fever is one of the most fatal diseases of childhood. It is always present in large communities, and is met with in epidemic form when least expected. Season does not seem to influence its presence. Most of the patients being among school children, it is most frequent during the school term. The eruption, the pulse, and the temperature must be considered in making a diagnosis. It is usually easy to diagnose it at the first visit. The incubation is rarely longer than four days. The initial symptom is usually vomiting, which must be initial to be of value for diagnostic purposes. Sore throat follows, and is always present. It begins as a pharyngitis and becomes a tonsillitis. The diagnosis cannot be made from the throat condition alone; skin eruption is a necessity before a positive diagnosis can be made. It appears not sooner than twenty-four hours after the onset of the tonsillitis, and not later than forty-eight hours after it. Strawberry tongue appears a day or two later than the eruption. The onset of the disease is usually accompanied with a rise of temperature. In the treatment, divided into prophylactic and remedial, the author considered isolation, light diet, daily ablutions, the avoidance of chill, and gentle diuretics and laxa-

tives. The excretions and the urine should be carefully watched, and the nasopharynx should receive attention. One should be on the lookout for a rise of temperature indicating inflammation in the ear, which should be promptly attended to. Suppuration of the glands disappears as recovery progresses if the glands are not swollen. It is the complications in scarlet fever that cause most of the trouble. The author has used antistreptococcic serum with favorable results.

Measles. Philip Marvel, Atlantic City.

The failure to find the micro-organisms in this disease does not prove that it is not caused by bacteria. Dr. Marvel described the disease and gave the points of differentiation between it and other eruptive fevers resembling it, with which it sometimes exists simultaneously.

Roethlin. Alexander McAlister, Camden.

The differential diagnosis in this disease is seldom easy. It resembles morbilli in its skin manifestations, and scarlet fever in its throat manifestations. It has no single distinctive feature, apart from the epidemic considered as a unit; yet no exanthem of this class is more distinctive. The rose-rash is the most conspicuous symptom. Another help in diagnosis is the presence or absence of the Koplik spots, which probably never appear in roethlin, but are never absent in morbilli. It is unlike morbilli, also, in the earlier eruption, of more florid hue, not crescentically arranged, and with smaller individual papules; and in the milder catarrhal symptoms. It is unlike scarlatina in not having the rapid pulse, strawberry tongue, marked fever, and grave complications of that disease. Rash is usually the first symptom observed, and is more nearly like that of morbilli than like that of any other exanthem. It persists longer than does that of either morbilli or scarlatina. In early and isolated cases, notice that the elevation and decline of temperature coincident with the spreading and fading of the rash points to scarlet fever. Extensive eruption without disturbance of temperature or considerable desquamation is not scarlet fever. A profuse rose-rash without the considerable catarrhal or febrile phenomena is probably not morbilli.

Smallpox. E. E. Worl, Newark.

After defining smallpox, Dr. Worl considers the unvaccinated classes, the conditions of liability or receptivity to the disease, the teaching of contagious diseases, and the

differential diagnosis between smallpox and other infections—chickenpox, measles and pustular syphilide. He then refers to mild epidemics of smallpox, indulges in some historic memories, and relates the prophecy of Thomas Jefferson, and winds up the paper with a plea for the necessity of vaccination.

Discussion opened by Henry J. F. Wallhauser, Newark.

Discussion was opened by Dr. Henry J. F. Wallhauser, of Newark, who confined his remarks to the differential diagnosis, which he treated at considerable length. He said that while one may surmise the possible character of the condition during the stage of invasion, one is not justified in giving a positive diagnosis until the eruption is fairly well developed. He then took up the differential diagnosis between each of the eruptive diseases and every other of these, giving the points in detail.

Dr. E. B. Silvers, of Rahway, called attention to the use of sulphide of calcium in modifying attacks of measles and as a prophylactic in that disease. He also thinks that it had a favorable effect in confluent smallpox, shortening the attack and preventing pitting.

Dr. David E. English, of Milburn, said that he believes that the diagnosis in scarlet fever can almost always be made long before desquamation. He does not think that cold baths are beneficial in scarlet fever. He is opposed to putting anything greasy on the skin in that disease to prevent the scales from coming off, as he thinks that this also prevents the excretion of poisonous matter through the skin and increases the liability to nephritis. He is likewise opposed to the quarantining of cases of measles, especially in the country, as he thinks it better for persons to have this disease in childhood. He likewise does not believe in quarantining cases of smallpox, believing that it puts the burden on the persons who are paying large sums of money to protect those who will not get vaccinated. He said that a man who would not be vaccinated once in five years ought to be imprisoned.

Dr. Frank W. Pinneo, of Newark, said that the use of potassium chlorate will prevent many of the complications in middle-ear infection from scarlet fever. The best way to employ it is in the form of a throat wash so made that no harm will ensue should some of it be swallowed.

Dr. Henry Mitchell, of Asbury Park, said that measles has never been efficiently prevented. One reason is that it is seldom rec-

ognized in its early stage, being taken for a cold. The medical inspection of schools promises something in the prophylaxis of this disease. Teachers should be taught the early signs of measles.

Dr. Harold D. Corbusier, of Plainfield, spoke of his experience with vaccination in the Philippines. He found that many that had been recently vaccinated and had had good sores were susceptible to revaccination. He attributes this to the fact that the arm had not been properly protected, the sore having been the result of infection and not of vaccination. Whenever persons say that they have had a very sore arm, he is suspicious. He is always careful to have the arm well protected from infection. He thinks that physicians should see that every child at whose birth they attend is vaccinated very early in life. Smallpox, which was rampant in the Philippine Islands, has been almost obliterated there since the Americans have taken possession.

Dr. Duncan W. Blake, of Gloucester, said that in the discrete type of smallpox and chickenpox there is no distinctive symptom in the one that is not found in the other. Therefore, errors in diagnosis must occur.

Dr. Philip Marvel, of Atlantic City, closing the discussion, said that he had mentioned prophylactic treatment of measles, but that he did not believe in the treatment of the disease *per se*. In the majority of cases there is mixed infection, and the patients frequently already suffer with intercurrent disturbances when seen. Dr. Marvel had not been aware of the existence of any specific treatment for measles. He had listened with interest to the remarks of Dr. Silvers, but he felt that the mere administration of one or another drug in a few cases of any disease with favorable results would not constitute sufficient evidence that this drug is a specific in that disease. In regard to Dr. English's remarks, Dr. Marvel thought it a rather bold declaration for any physician to state that he does not believe in quarantine for any contagious disease. We are not dealing with ideal conditions, but with conditions as we find them. The mass of ignorance among the public is the most distressing obstacle to the treatment of diseases. The physician should try to lessen this ignorance among his patients, and should insist upon as great a degree of isolation as is possible. It is believed by many clinicians that a number of the eruptive diseases are due to one primary cause, and that the environment of the individual, etc., at the time the disturbance occurs makes the

difference in the manifestation of the disease. Opposed to this view, however, is the fact that an attack of one eruptive disease does not prevent an attack of some other. The declaration that chlorate of potash is effective in preventing middle-ear disease had astonished Dr. Marvel, and he said he should take an interest in investigating its action in this class of cases. In regard to the inspection of the public schools and the instruction of the teachers regarding the early signs of measles, Dr. Marvel wished that Dr. Mitchell had gone a step further and advocated special instruction of the physicians that are made inspectors of these schools.

Dr. Worl, closing, referred to the remarks in regard to tuberculosis, made by Dr. Howard A. Kelly, of Baltimore, at the banquet the preceding evening, and said that this disease will never be controlled until you begin with the factors that create it. The measles carries off more children under two years of age than does any other disease except whooping cough, and it leaves a tendency toward enlarged glands, which are a fruitful source of tuberculosis. Dr. Worl did not believe that any one ought to have any disease that he could escape. No one likes to have even a simple, non-fatal malady. He thought that there should be a uniformity of practice in both city and country in regard to quarantining. He also was in favor of the old way of vaccinating with the scab from other human vaccinations.

Dr. English explained that he had not meant to speak against isolation as part of the treatment of measles, but only against quarantining for that disease in the country.

Dr. Williams, closing, defended the use of cold baths in scarlet fever. He had looked up literature very thoroughly, and has come to the conclusion that they do good and do not increase the tendency to nephritis.

Dr. Silvers said that he believed sulphide of calcium to have prophylactic powers, and had only wished to have it placed on trial.

Dr. Chandler said that he did not wish the impression to go out that the Medical Society of New Jersey was in favor of an enforced quarantine in smallpox. If we had as good protection against other diseases as we have against smallpox (in vaccination) he would be in favor of abolishing enforced quarantine in all diseases. In enforcing a rigid quarantine against smallpox we are punishing many innocent persons for the crimes of a few guilty ones.

Dr. Marcy endorsed these sentiments.

The paper of Dr. Margaret Brewster,

owing to her absence on account of sickness, was read by title. The general session then adjourned.

AN ALPHABETICAL LIST

Of the Members of the Medical Society of New Jersey.*

Compiled July, 1907.

- Abbott, Benjamin T., Ocean City. (5)
 Abbott, Henry D., 24 East 33d St., Bayonne. (9)
 Ackley, David B., 878 E. State, Trenton. (11)
 Adams, Chas. F., 52 W. State, Trenton. (11)
 Adams, Ellsworth S., Beverly. (3)
 Adams, John K., 475 Main St., Orange. (7)
 Adams, J. O., 937 N St., N. W., Washington, D. C.
 Adsit, Noble H., Succasunna. (14)
 Agnew, Frank E., 29 Hamilton, Paterson. (16)
 Albano, Giuseppe, 498 Chester Ave., Newark. (7)
 Albertson, William C., Belvidere. (21)
 Albright, John C., 194 Broadway, So. Amboy (12)
 Alexander, Archibald F., 379 Union av., Paterson.
 Alexander, Walter G., 67 Oakwood Ave., Orange.
 Allen, Edgar, Pattenburg. (10)
 Allen, Ulamor, 401 Ogden Ave., Jersey City. (9)
 Allen, William C., Blairstown. (21)
 Allers, Henry, 109 Harrison Ave., Harrison. (9)
 Allis, Jeremiah A., 386 Park St., Upper Montclair.
 Ames, Elmer H., 17 Madison Ave., Jersey City. (9)
 Anderson, Calvin, Madison (14)
 Anderson, Wm. Edgar, Englishtown. (13)
 Andress, T. H., Sparta. (19)
 Applegate, Asher T., Englishtown. (13)
 Ard, Frank C., Plainfield. (20)
 Areson, Wm. H., 153 Blvu. ave., Upper Montclair.
 Arlitz, William J., 803 Hudson St., Hoboken. (9)
 Armstrong, Alex., 323 S. Broad, Trenton. (11)
 Armstrong, Edw. C., 512 Fulton, Town of Union.
 Armstrong, Samuel E., Rutherford. (2)
 Arthur, Francis M., Hamilton Square. (11)
 Ashcraft, Samuel F., Mullica Hill. (7)
 Asher, Maurice, 20 Court, Newark. (7)
 Asnis, Eugene J., Woodbine. (5)
 Atherton, A. L., 1005 Pacific ave., Atlantic City.
 Atkinson, James W., 27 Church, Paterson. (16)
 Ayres, Melancthon S., Ridgefield. (2)
 Bacevycze, Anthony M., 119 Madison Ave., New'k.
 Baer, Joseph S., 565 Stevens St., Camden. (4)
 Bailey, Charles H., 189 Liberty, Bloomfield. (7)
 Bailey, Frederick R., 1165 E. Jersey, Elizabeth.
 Bailey, Wilson G., B'dway and Pine, Camden. (4)
 Bailey, Wm. O., 282 S. Orange Ave., Newark. (7)
 Baird, David, Jr., Florence. (3)
 Baker, Charles F., 47 Walnut, Newark. (7)
 Baker, E. Mills, 103 Wayne St., Jersey City. (9)
 Baker, George H., Long Branch. (13)
 Baker, Raymond D., Summit. (14)
 Baldwin, Aaron K., 291 Plane, Newark. (7)
 Baldwin, Sam'l H., 479 Clinton Ave., Newark. (7)
 Baldwin, Winfred E., 462 Orange, Newark. (7)
 Balleray, George H., 115 B'way, Paterson. (16)
 Banker, Pierre A., 1156 E. Jersey, Elizabeth. (20)
 Banks, Hardy M., Englewood. (2)
 Banta, John H., 119 Broadway, Paterson. (16)
 Barbash, Samuel, 1906 Pacific ave., Atlantic City.
 Barber, Isaac, Phillipsburg. (21)
 Barnes, William M., Springfield. (20)
 Barrington, Richard C., Mt. Holly. (3)
 Bartlett, Clara K., 11 No. N. Car. ave., Atlantic C.
 Barwis, Elmer, 211 Hamilton ave., Trenton. (11)
 Barrows, Arthur M., 300 S. Clinton, Trenton. (11)
 Bateman, Frank M., Cedarville. (6)
 Baumann, John J., 126 Mercer St., Jersey City.
 Baumann, Louis, 250 5th, Jersey City. (9)
 Beach, Edward M., West Long Branch. (13)
 Beatty, Enos E. B., Newton. (19)
 Beatty, Henry M., 50 Centre, Trenton. (11)
 Bebout, Theodore W., Stirling. (14)
 Becker, Gustav A., Morristown. (14)
 Becker, Frederick W., 478 Clinton St., Newark.
 Becket, George C., 135 N. Walnut, East Orange.
 Beekman, John B., Pluckamin. (18)
 Beling, Chris. C., 1098 Broad St., Newark. (14)
 Bell, J. Finley, Englewood. (2)
 Benedict, Alfred C., 69 Ward Pl., S. Orange. (7)
 Benjamin, Dowling, 215 Cooper St., Camden. (4)
 Bennett, Chas. D., 167 Clinton Ave., Newark. (7)
 Bennett, John K., Gloucester City. (4)
 Bennett, John W., Long Branch. (13)
 Bennett, Reginald S., Asbury Park. (13)
 Bentley, David F., 829 Elm St., Camden. (4)
 Bergin, Joseph V., 19 Church, Paterson. (16)
 Best, George N., Rosemont. (10)
 Beveridge, William W., Asbury Park. (13)
 Bianchi, Angelo R., 104 7th Ave., Newark. (7)
 Bicker, Francis J., Fillmore St., Camden. (4)
 Bilderbach, Francis, Salem. (17)
 Bingham, Arthur W., 299 Main, East Orange. (7)
 Bissett, John J., Main St., South River. (12)
 Blair, J. E., Burlington. (3)
 Blake, Duncan W., Gloucester City. (4)
 Blanchard, Oliver R., 37 Clinton Ave., Jersey City.
 Bleick, Theo. E., 340 Waverly Ave., Newark. (7)
 Bleick, Wm. D., 517 Clinton Ave., Newark. (7)
 Blenckstone, Fred. O., Oradell. (2)
 Bleyle, Herman C., 15 Walnut, Newark. (7)
 Bloom, David M., 235 S. 6th St., Newark. (7)
 Blundell, William, 99 Fair, Paterson. (16)
 Boone, William C., Plainfield. (20)
 Bogardus, Henry J., 427 Bergen Ave., Jersey City.
 Borgmeyer, J. G. Lewis, 67 W. 8th, Bayonne. (9)
 Bossard, Harry B., Harmony. (21)
 Bossert, Leon H., Newport. (6)
 Bowden, David T., 117 Paterson, Paterson. (16)
 Bowyer, Frank F., 262 Barrow St., Jersey City. (9)
 Boyle, Thomas P., 110 Bellevue Ave., Newark. (7)
 Boysen, Theophilus H., Egg Harbor. (1)
 Braddock, Charles S., Jr., Haddonfield. (4)
 Bradford, Edward B., Port Norris. (6)
 Bradford, Stella S., Montclair. (7)
 Bradner, Frederick C., Englewood. (2)
 Bradshaw, John H., 27 High St., Orange. (7)
 Brasefield, Edgar N., Phillipsburg. (21)
 Braun, Rudolph, 180 Polk, Newark. (7)
 Bray, Walter S., 902 N. 2d St., Camden. (4)
 Brewer, William, Woodbury. (8)

*The figures in parentheses indicate the county society to which the member belongs. The following is a list of the counties with their respective numbers:

Atlantic (1); Bergen (2); Burlington (3); Camden (4); Cape May (5); Cumberland (6); Essex (7); Gloucester (8)
 Hudson (9); Hunterdon (10); Mercer (11); Middlesex (12); Monmouth (13); Morris (14); Ocean (15); Passaic (16); Salem
 (17); Somerset (18); Sussex (19); Union (20); Warren (21).

- Brewster, Margaret P., Grantwood. (2)
 Bridges, Isabel M., 497 Mt. Pleasant Ave., New'k.
 Brien, William M., 585 Valley Rd., W. Orange.
 Brinkerhoff, Henry H., 695 Bergen Ave., Jersey C.
 Briody, James F., 385 Main, Paterson. (16)
 Britton, Chas. P., 126 W. State, Trenton. (11)
 Broderick, John J., 355 Pacific Ave., Jersey City.
 Brooke, William W., 915 Ave. C, Bayonne. (9)
 Brouwer, Frank, Toms River. (15)
 Brown, Harvey S., Freehold. (13)
 Brown, James S., 43 S. Fullerton ave., Montclair.
 Browne, J. Alex., 310 Grand, Paterson. (16)
 Bruckner, Charles H., 118 Newton, Newark. (7)
 Brundage, Philip Edwin, Grantwood. (2)
 Bruyere, John, 123 Perry, Trenton. (11)
 Buchanan, J. Hervey, North Plainfield. (18)
 Buckingham, Frederick S., Lakewood. (15)
 Buerman, William, 352 Belmont Ave., Newark.
 Bull, Edward L., 2 Madison Ave., Jersey City. (9)
 Bullen, Victor E., 148 Hamilton ave., Paterson.
 Bunting, P. DuBois, 11 3d, Elizabeth. (20)
 Burd, Lewis S., Ogdensburg. (19)
 Burd, William J., Belvidere. (21)
 Burke, Charles V., 537 E. Ferry St., Newark. (7)
 Burnett, Hayes J., 25 Orange Road, Montclair.
 Burnett, Thomas F., 253 Court, Elizabeth. (20)
 Burnette, Henry H., 724 Wash'gton St., Hoboken.
 Burns, Edwin L., 269 Broad, Newark. (7)
 Burrage, Robert L., 383 Mt. Prospect Ave., New'k.
 Burt, Frederick C., Hammonton. (1)
 Bushey, Sylvan G., 508 Haddon Ave., Camden.
 Buttler, Charles V., 139 Albany, New Bruns. (12)
 Buttner, Carl, Day St. cor. White St., Orange. (7)
 Buvinger, Charles W., 5 S. Arlington Ave., E. O.
- Calhoun, Charles, Rutherford. (2)
 Campbell, Charles M., 642 Main, Paterson. (16)
 Campbell, Dundas Ralph, 442 Warren, Newark.
 Campbell, Wellington, Short Hills rd, Short Hills.
 Campbell, William K., Long Branch. (13)
 Cantwell, Frank V., 78 N. Clinton ave., Tren. (11)
 Carhart, Henry O., Blairstown. (21)
 Carman, Fletcher F., 129 Walnut, Montclair. (7)
 Carman, John H., Plainfield. (20)
 Carpenter, Abram E., Boonton. (14)
 Carpenter, William H., Salem. (17)
 Carrigan, Eugene E. S., Point Pleasant. (15)
 Carroll, Alexander J., Morris Plains. (14)
 Carroll, Edgar, Main, Dayton. (12)
 Carroll, William H., 119 Jefferson, Passaic. (16)
 Casperson, Robert, 215 N. 3d St., Camden. (4)
 Cassaday, John B., Burlington. (3)
 Case, Levi W., 41 Park, Montclair. (7)
 Cater, Douglas A., 107 Park, E. Orange. (7)
 Chandler, Henry M., 408 Main, Orange. (7)
 Chandler, Wm. J., 65 S. Orange ave., So. Orange.
 Chambers, Talbot R., 15 Exchange Pl., Jersey City
 Chapman, Ellis J., Shiloh. (6)
 Chard, John A., 14 Virginia Ave., Jersey City. (9)
 Charlesworth, Irving E., Bridgeton. (6)
 Charlesworth, Ralph R., Millville. (6)
 Chattin, J. Franklin, 40 W. State, Trenton. (11)
 Chavanne, Henry, Salem. (17)
 Chew, Elisha C., 28 So. Ky. ave., Atlantic City.
 Child, Frank M., 927 Washington St., Hoboken.
 Christian, Albion C., Irvington. (7)
 Cladek, Walter E., Rahway. (20)
 Clark, A. Schuyler, 531 Madison ave., N. Y. (12)
 Clark, Emma C., Dover. (14)
 Clark, J. Henry, 12 Walnut, Newark. (7)
 Clark, Staats V. D., 89 Bayard, New Bruns. (12)
 Clark, William A., 51 W. State, Trenton. (11)
 Clawson, Marcus L., Plainfield. (20)
 Clay, Thomas A., 30 Sheridan ave., Paterson. (16)
 Clossen, Edward W., Lambertville. (10)
- Coe, Richard, 11 Warren, Newark. (7)
 Cohen, Nathan A., Wildwood. (5)
 Cohn, Herman, 281 Mulberry St., Newark. (7)
 Coit, Henry L., 277 Mt. Prospect Ave., Newark.
 Cole, Martin, Hainesville. (19)
 Coleman, Joseph G., Hamburg. (19)
 Coles, J. Ackerman, Scotch Plains. (20)
 Colie, Edward Martin, 109 Prospect, E. Orange.
 Collier, William S., 723 S. Broad, Trenton. (11)
 Conaway, Walt P., 1723 Pac. ave., Atlantic City.
 Conduct, Arthur W., Dover. (14)
 Conduct, Isaiah W., Dover. (14)
 Condon, John F., 168 Washington, Belleville. (7)
 Condon, William J., 336 George, New Bruns. (12)
 Conover, E. E., Hasbrouck Heights. (2)
 Conover, John H. P., 1077 E. Jersey, Elizabeth.
 Conrad, Edgar K., Hackensack. (2)
 Converse, Charles B., 218 Palisade Ave., Jersey C.
 Cook, Frank B., Laurel Springs. (4)
 Cook, Hugh F., 15 Roseville Ave., Newark. (7)
 Cook, Mary, 16 James St., Newark. (7)
 Cook, Richard L., Dover. (14)
 Cooke, Henry G., 7 Livingston av., New B. (12)
 Cooper, Edward P., Parsippany. (14)
 Cooper, J. Howard, East Millstone. (18)
 Corbusier, Harold D., Plainfield. (20)
 Cornwell, Alfred, Bridgeton. (6)
 Corrigan, George F., 344 Lafayette St., Newark.
 Corson, Elton S., Bridgeton. (6)
 Cort, Paul L., 144 W. State, Trenton. (11)
 Corwin, Fred M., 696 Ave. C, Bayonne. (9)
 Corwin, Theodore W., 5 W. Park, Newark. (7)
 Cory, Horace C., 224 Broad, Newark. (7)
 Cossitt, Harry A., Morris Plains. (14)
 Costill, Henry B., 506 E. State, Trenton. (11)
 Coultas, Aldo B., Madison. (14)
 Craig, Burdette P., 61 Highland Ave., Jersey City.
 Cramer, Alfred, Jr., 218 N. 5th St., Camden.
 Cramer, Isaac S., Flemington. (10)
 Crane, Josiah Wellington, 17 Bank, Newark. (7)
 Crater, Ellis W., Ocean Port. (13)
 Crawford, David H., 331 Belleville, Newark. (7)
 Craythorn, John C., 302 W. State, Trenton. (11)
 Cregar, Peter B., Plainfield. (20)
 Cropper, Charles W., 85 Gifford Ave., Jersey City.
 Cross, Anna M., 20 Marshall, Newark. (7)
 Crounse, David R., 84 Bloomfield ave., Pas. (16)
 Culver, D. LeRoy, 287 York St., Jersey City. (9)
 Culver, George M., 49 Tonnelle Ave., Jersey City.
 Culver, S. Herbert, 98 Magnolia Ave., Jersey City.
 Cummins, G. Wyckoff, Belvidere. (21)
 Curtis, Frank W., Stewartsville. (21)
 Curtis, James H., 30 Church, Paterson. (16)
 Curtis, Robert M., 30 Church, Paterson. (16)
 Currie, Daniel A., Englewood. (2)
 Currie, Norman W., Plainfield. (20)
 Cuskaden, Albert D., 2 So. Mich. ave., Atlantic C.
- Dallas, Alexander, 24 E. 22d St., Bayonne. (9)
 Danzis, Max, 46 Mercer St., Newark. (7)
 Darnall, W. Edgar, 1704 Pacific av., Atlantic City.
 Davenport, George S., Garfield. (16)
 Davenport, Peter B., Vailsburgh. (7)
 Davis, Henry H., 569 Benson St., Camden. (4)
 Davis, Henry V., North Branch. (18)
 Davis, John B., 6th and Lawrence Sts., Camden.
 Davis, Richard M., Salem. (17)
 Davis, William A., 511 Cooner St., Camden. (4)
 Davis, Wm. H. K., 42 N. Arlington av., E. Orange
 Davis, W. Price, 1721 Pacific ave., Atlantic City.
 Davison, C. K., Stanhope. (19)
 Day, Grafton E., 427 Haddon Ave., Camden. (6)
 Day, Harry V., Butler. (14)
 Dearborn, Reuben B., Basking Ridge. (20)
 Decker, Clinton L., Boonton. (14)

- Dedrick, Thomas S., Washington. (21)
 De Grofft, Eugene E., Woodstown. (17)
 DeGroot, George S., Mendham. (14)
 DeJager, Simon, 83 Bridge, Paterson. (16)
 Demarest, Frederick F. C., 29 Academy, Passaic.
 DeHart, Clara M., 99 Mercer, Jersey City. (9)
 DeMerritt, Chas. L., 394 Clinton Ave., W. Hobo'n.
 De Mund, Cornelius A., Ridgewood. (2)
 De Mund, John F., Ridgewood. (2)
 Denner, Edward F., 221 B'dway, Paterson. (16)
 Dennis, John, 287 Belleville Ave., Newark. (7)
 DeVausney, Winfield S., 102 Central Ave., New'k.
 Devlin, Frank, 98 Congress, Newark. (7)
 Devlin, Hugh Joseph, 167 Orchard, Newark. (7)
 Dey, Addison H., 430 E. State, Trenton. (11)
 Diamant, Edward L., Bridgeton. (6)
 Dias, Joseph L., 91 S. 19th St., Newark. (7)
 Dickinson, Ernest L., 100 Greenwood ave., T. (11)
 Dickinson, Gordon K., 280 M'tgomery St., Jer. C.
 Dieffenbach, Richard G. P., 222 S. Orange Av., N.
 Dill, Daniel M., 425 S. Orange Ave., Newark. (7)
 Dinglestedt, Richard H., 300 Hudson, Hoboken.
 Disbrow, Edwin C., Toms River (15)
 Disbrow, Rem Lefferts, Toms River. (15)
 Disbrow, Vanderhoef M., Lakewood. (15)
 Disbrow, Wm. S., 151 Orchard St., Newark. (7)
 Diverty, Henry B., Woodbury. (8)
 Dix, J. Morgan, Cape May C. H. (5)
 Dodge, Walter, 32 Cleveland St., Orange. (7)
 Dodson, Louis W., 660 Jersey Ave., Jersey City.
 Donges, John W., 525 Broadway, Camden. (4)
 Dolan, Thomas E., 250 1st ave., Elizabeth. (20)
 Dolphin, Michael O. F., 112 N. 4th, Harrison. (9)
 Donahue, Lucius F., 33 Dodge St., Bayonne. (9)
 Donohue, Frank B., 389 Main, Paterson. (16)
 Donohue, Frank M., 139 Albany, N. Bruns. (12)
 Donovan, Alfred Q., 132 E. Jersey, Elizabeth. (20)
 Dougherty, Arthur C., 158 Washington, Newark.
 Douglas, James, Morristown. (14)
 Douglass, John S., Tuckahoe. (5)
 Drake, Francis J., Phillipsburg. (21)
 Dubell, John E., Columbus. (3)
 Duckett, Warren J., 932 Summit Ave., Jersey C.
 Duffell, Charles, Salem. (17)
 Duffield, Elias M., Glassboro. (8)
 Duncan, Owsley B., Haledon. (16)
 Dundon, Arthur H., North Plainfield. (18)
 Dunkel, Edwin K., 278 M'tgomery St., Jersey City.
 Dunlap, Mary J., Vineland. (6)
 Dunlap, Thomas G., 921 Pacific ave., Atlantic City.
 Dunn, Fred V., 623 S. 3d St., Camden. (4)
 Dunning, Charles M., Franklin. (19)
 Dunning, Walter L., 533 River, Paterson. (16)
 Duryee, John L., 436 High, Newark. (7)
 Dyer, Florence A., Wilcox, Elk County, Pa. (3)
 Eagleton, Wells P., 15 Lombardy, Newark. (7)
 Eaton, Alvin R., Jr., 1157 E. Jersey, Elizabeth.
 Edwards, J. Gaunt, Williamstown. (8)
 Edwards, Sarah M., 207 Summer Ave., Newark.
 Ellis, Alfred L., Main, Metuchen. (12)
 Elmer, Matthew K., Bridgeton. (6)
 Elmer, William, 44 W. State, Trenton. (11)
 Elsing, Henry C., Ridgfield Park. (2)
 Elwell, Alfred M., 407 Cooper St., Camden. (4)
 Ely, Lancelot, Flanders. (14)
 Emerson, Linn, 234 Main St., Orange. (7)
 Endicott, George W., Plainfield. (20)
 English, David C., 363 George, New Bruns. (12)
 English, David E., Millburn. (7)
 English, James R., 830 Clinton Ave., Newark. (7)
 Enright, James G., 451½ Jersey Ave., Jersey City.
 Epstein, Henry B., 465 High, Newark. (7)
 Evans, Britton D., Morris Plains. (14)
 Everitt, Chauncey V., 38 Boyd Ave., Jersey City.
 Everitt, John R., 38 Boyd Ave., Jersey City. (9)
 Ewen, Warren L., Alloway. (17)
 Ewens, Arthur E., 1512 Pacific ave., Atlantic City.
 Ewing, E. Eldridge, Cape May. (6)
 Ewing, John H., Flemington. (10)
 Exton, James A., 75 Beach St., Arlington. (9)
 Faber, John, 289 Central Ave., Jersey City. (9)
 Faison, William F., 490 Jersey Ave., Jersey City.
 Farr, John C., Jr., 1228 Bloomfield St., Hoboken.
 Farrow, J. Willard, Dover. (14)
 Farrow, Levi, Hackettstown. (14)
 Fee, Elam K., Lawrenceville. (11)
 Felty, John C., P. O. Box 258, Trenton. (11)
 Ferguson, Benjamin W., Beemerville. (19)
 Fewsmith, Joseph, 47 Central Ave., Newark.
 Fewsmith, Joseph L., 76 Central Ave., Newark.
 Field, Edwin, Red Bank. (13)
 Finke, Charles H., 317 York, Jersey City.
 Finn, Frederick A., 157 Danforth Av Jersey City.
 Finn, Joseph F., 157 Danforth ave., Jer. City. (9)
 Fischer, Arnim, 42 16th Ave., Newark. (7)
 Fischer, George, 90 Auburn, Paterson. (16)
 Fish, Clyde M., Pleasantville. (1)
 Fisher, Claudius R. P., Bound Brook. (18)
 Fisler, C. Frank, Clayton. (8)
 Fitch, George W. H., Daretown. (17)
 Fitch, Thomas S. P., 14 Prospect St., E. Orange.
 Fithian, George W., 195 High, Perth Amboy. (12)
 Fithian, Joel W., 608 Broadway, Camden. (4)
 Flitcroft, William, 510 River, Paterson. (16)
 Flagge, Frederick W., Rockaway. (14)
 Flood, G. Balleray, 279 B'dway, Paterson. (16)
 Flynn, John J., Mt. Holly. (3)
 Flynn, Thomas H., Somerville. (18)
 Fogg, Edward S., Bridgeton. (6)
 Foley, Michael F., 710 Hudson St., Hoboken. (9)
 Popeano, Joseph L., 265 4th St., Hoboken. (9)
 Forman, Archibald C., 41 W. 32d St., Bayonne.
 Forman, D. McLean, Freehold. (13)
 Forman, Howard S., 103 Jewett ave., J. City. (9)
 Forney, N. N., 50 Livingston av., N. Bruns. (12)
 Foster, George H., Rockaway. (14)
 Foster, W. Story, 111 Bloomfield Ave., Newark.
 Frace, Peter W., 106 11th St., Hoboken. (9)
 Francis, Richard P., 12 Plymouth, Montclair. (7)
 Frank, M. G., Egg Harbor. (1)
 Franklin, Geo. H., Hightstown. (11)
 Franklin, Lewis, 193 Palisade ave., Jersey City.
 Freeland, Frank, Maywood. (2)
 Freeman, Richard D., 52 Vose ave., South Orange.
 Freeman, Samuel, 314 S. Broad, Trenton. (11)
 Friele, William, 203 Palisade ave., Jersey City. (9)
 Fritts, John T., Plainfield. (20)
 Funk, Joseph, 615 Elizabeth ave., Eliazbeth. (20)
 Funkhauser, Edw. B., P. O. Box 258, Tren. (11)
 Fyfe, George D., 540 Bramhall ave., J. City. (9)
 Gage, Ruel S., 17 Gould Ave., Newark. (7)
 Gale, George Bancroft, Rutherford. (2)
 Galloway, Geo. E., Rahway. (20)
 Gamson, Emil, 39 W. 22nd St., Bayonne. (9)
 Garrabrant, C., 131 N. Vermont av., Atlantic City.
 Garrison, Charles C., Merchantville. (4)
 Garrison, Daniel, Pennsgrove. (17)
 Garrison, Joseph E., Ocean City. (5)
 Garside, Charles Z., 130 Garside St., Newark.
 Gaston, Mary E., Somerville. (18)
 Gaston, William F., Plainfield. (20)
 Gauch, William, 199 High, Newark. (7)
 Gelbach, Rudolph W., 809 Hudson St., Hoboken.
 Geyer, George W., Cape May C. H. (5)
 Gifford, T. Franklin, Woodbury. (8)
 Gilbert, James S., Bordentown. (3)
 Gilchrist, Charles A., 916 Hudson St., Hoboken.

- Gillé, Hugo, 149 Congress St., Jersey City.
 Gillson, John T., 391 Main, Paterson. (16)
 Gillson, Michael W., 11 Lee Pl., Paterson. (16)
 Gilman, Robert B., 85 Congress St., Jersey City.
 Githens, T. S., 1004 Pacific ave., Atlantic City. (1)
 Glazebrook, Francis H., Morristown. (14)
 Glendon, Walter P., Cedarville. (6)
 Gluckman, Isaac E., 70 Wickliffe, Newark. (7)
 Godfrey, Edmund L. B., 400 Linden, Camden. (4)
 Goldberg, Eugene H., 238 Kearny av., Kearny (9)
 Good, William T., Bridgeton. (17)
 Goodwin, William M., 70 Congress, Newark. (7)
 Gordon, Altamont L., Burlington. (3)
 Gordon, Clark H., 930 E. State, Trenton. (11)
 Gordon, Edward J., 1010 S. Clinton, Trenton. (11)
 Gorton, Eliot, Summit. (14)
 Graff, Effie R., Somerville. (18)
 Graves, William B., 426 Main, E. Orange. (7)
 Gray, Frank D., 673 Bergen Ave., Jersey City. (9)
 Gray, John Walter, Summit. (20)
 Gray, Thomas N., 20 Halsted, East Orange. (7)
 Green, James S., 463 N. Broad, Elizabeth. (20)
 Green, William S., 73 Paterson, Paterson. (16)
 Greenbaum, Solomon, 142 W. Kinney, Newark.
 Greenfield, B. H., 205 S. Orange Ave., Newark.
 Greenwood, Nathaniel S., Rosenhayn. (6)
 Gregory, Thirza L., Englewood. (2)
 Grier, Clarence R., 821 So. 5th, Camden. (4)
 Grier, Edgar B., 400 Westminster ave., Elizabeth.
 Griffith, John H., Phillipsburg. (21)
 Griffiths, Chauncey B., 145 Monmouth, Newark.
 Gross, Herman D., Main, Metuchen. (12)
 Griswold, James B., Morristown. (14)
 Guenther, Emil E., 159 W. Kinney, Newark. (7)
 Guion, Edward, 32 So. Virg. ave., Atlantic City.
 Gutherson, Wm. F., 1080 Madison ave., Paterson.
 Gutmann, Benjamin, 418 George, New B. (12)
 Hagar, John F., 88 Ferry, Newark. (7)
 Hagen, Charles W., 224 S. Orange Ave., Newark.
 Hagerty, John F., 30 Wallace Pl., Newark. (7)
 Haggerty, Frederick W., Vienna. (21)
 Hagney, Frederick W., 69 Penn. ave., Newark.
 Haines, Edgar J., Medford. (3)
 Haines, Edward E., 134 David, So. Amboy. (12)
 Haines, Eleanor, 934 Broad, Newark. (7)
 Haines, J. Clifford, Vincentown. (3)
 Haines, J. Ridgway, Mt. Holly. (3)
 Haines, Roland I., 300 Kaighn Ave., Camden. (4)
 Haley, John J., Gloucester City. (4)
 Hall, Walter E., Burlington. (3)
 Hallett, Frederick S., Hackensack. (2)
 Halsey, Levi W., 49 Church, Montclair. (7)
 Halsey, Luther M., Williamstown. (8)
 Halsted, Charles F., Somerville. (18)
 Hamill, Patrick J., 300 Varick St., Jersey City.
 Hance, Irwin H., Lakewood. (15)
 Hand, Anna M., Cape May City. (5)
 Hand, Leslie L., Lakehurst. (6)
 Hamill, Edward H., Prudential Bldg., Newark.
 Hamil, Robert H., Summit. (20)
 Hardenburg, Dan'l S., Jr., 354 Pacific av., J. City.
 Harbert, G. Eugene, 540 Main, East Orange. (7)
 Haring, John J., Tenaflly. (2)
 Harman, William J., 1162 E. State, Trenton. (11)
 Harreys, Charles W., Ridgewood. (2)
 Harris, Frank, 214 N. Warren, Trenton (11)
 Harris, Frank B., Canton. (17)
 Harris, Philander A., 26 Church, Paterson. (16)
 Harrison, Joseph B., Westfield. (20)
 Hart, Edward P., 264 Montgomery St., Jersey C.
 Hart, Hugh M., 16 Gouveneur, Newark. (7)
 Harvey, E. H., 20 N. Fla. ave., Atlantic City. (1)
 Harvey, Thos. W., Main and Hillyer sts., Orange.
 Hasking, Arthur P., 318 M'tgomery St., Jersey C.
 Haussling, Francis R., 661 High, Newark. (7)
 Haven, Samuel C., Morristown. (14)
 Havens, Walter P., Farmingdale. (13)
 Hawke, Edward S., 124 E. Hanover, Trenton (11)
 Hawkes, E. Zeh., 15 Central Ave., Newark. (7)
 Haydon, Joseph H., 22 Brientnall Pl., Newark.
 Hecht, John P., Somerville. (18)
 Hedges, Benjamin Van D., Plainfield. (20)
 Hedges, Ellis W., Plainfield. (20)
 Heintzelmann, Bert. S., 43 W. 33d St., Bayonne.
 Helfer, Samuel A., 626 Hudson, Hoboken. (9)
 Hemsath, John, 36 Spruce, Newark. (7)
 Hendrickson, Daniel D., Middletown. (13)
 Hendrickson, Henry A., Atlantic Highlands. (13)
 Henggeler, Jacob H., 47 Bridge, Paterson. (16)
 Henion, E. Lucas, 16 Church, Paterson. (16)
 Henriques, Henry A., Morristown. (14)
 Henry, Frank C., 134 State, Perth Amboy. (12)
 Henry, George, Flemington. (18)
 Henry, George W., 801 Walnut St., Camden. (4)
 Hepburn, William M., Freehold. (13)
 Heritage, Charles S., Glassboro. (8)
 Herold, Herman C. H., 77 Congress, Newark. (7)
 Heron, Alexander M., Lakewood. (15)
 Hetherington, Wm. L., 299 Varick St., Jersey City.
 Hewlings, J. W., Moorestown. (4)
 Hicks, William H., 425 So. Orange Ave., Newark.
 Hill, Christopher D., 299 York St., Jersey City.
 Hillegas, Eugene Z., Mantua. (8)
 Hilliard, W. T., Salem. (17)
 Hinckley, Livingston S., 182 Clinton Ave., New'k.
 Hires, Nathaniel S., Salem. (17)
 Hirst, Levi B., 586 Federal St., Camden. (4)
 Hoagland, B. W., Woodbridge. (20)
 Hoagland, Garret C., Keyport. (13)
 Hoagland, Lewis B., Oxford. (21)
 Hoell, Conrad G., 565 Benson St., Camden.
 Hoening, Charles E., 928 Hudson St., Hoboken.
 Hoffman, Peter, 209 Pavia Ave., Jersey City. (9)
 Holcombe, Chas. H., 41 W. State, Trenton. (11)
 Holden, Edgar, Jr., 617 Mt. Prospect av., Newark.
 Holler, Henry B., 234 Montclair ave., Newark.
 Hollingshead, I. W., 123 S. 18th St., Phila. (3)
 Hollingshead, Enoch, Pemberton. (3)
 Hollingshead, Lyman, Pemberton. (3)
 Hollister, L. Eugene, 138 Clinton Ave., Newark.
 Holmes, Edwin, Englewood. (2)
 Holmes, George J., 17 Pennington, Newark. (7)
 Hood, Bruno, Newton. (19)
 Horning, Frank L., 623 Market St., Camden. (4)
 Horsford, Fred. C., Morris Plains. (14)
 Houck, William J., 110 Bloomfield Ave., Newark.
 Howard, Emory E., Somers Point. (1)
 Howard, J. Edgar, Haddonfield. (4)
 Howard, Joseph T. D., Washington, D. C. (6)
 Howley, Barth. M., 421 George, New Bruns. (12)
 Huger, Joseph, Fort Lee. (2)
 Hughes, Fred J., North Plainfield. (18)
 Hughes, Morgan D., Branchville. (19)
 Hummel, Lester H., Salem. (17)
 Hunt, A. Clark, Holly, Metuchen. (12)
 Hunt, Joseph, Huntsville. (19)
 Hunt, Ralph H., 29 Harrison St., E. Orange. (7)
 Hunter, James, Jr., Westville. (7)
 Hurff, Joseph E., Blackwood. (4)
 Hussler, Siegfried, 273 S. 6th St., Newark. (7)
 Husted, Frank B., Quinton. (17)
 Hutchinson, A. Dunbar, 419 Chestnut av., Trenton.
 Ill, Charles L., 188 Clinton Ave., Newark. (7)
 Ill, Edward J., 1002 Broad, Newark. (7)
 Ingling, Harry W., Freehold. (13)
 Ireland, Milton S., 23 So. Cal. ave., Atlantic City.
 Iszard, William H., 411 N. 4th St., Camden. (4)

- Jackson, Andrew J., Matawan. (13)
 Jacob, Albert N., Sparta (19)
 Jacob, William H., 95 N. Main, Paterson. (16)
 Jacobson, Frederick C., 969 Broad, Newark. (7)
 Jacquemin, T. J., 506 Clinton av., West Hoboken.
 Jacques, J. Eugenia, 74 Waverly St., Jersey City.
 Jaffe, Joseph, Woodbine. (5)
 Jaquith, Walter A., Broad and Market, New. (9)
 James, Henry C., Mays Landing. (1)
 James, William H., Pennsville. (17)
 Janeway, Henry H., 11 Livingston av., N. B. (12)
 Janney, Joshua D., Cinnaminson. (3)
 Jarrett, Harry, 925 Broadway, Camden. (4)
 Jedel, Meyer, 362 Warren, Newark. (7)
 Jenkins, Mozart, 136 Walnut ave., Trenton. (11)
 Jennings, Chas. H., Centre St., Merchantville. (4)
 Jennings, William B., Haddonfield. (4)
 Johnson, Fred L., Stanton. (10)
 Johnson, George L., Morristown. (14)
 Johnson, Henry T., Pedricktown. (17)
 Johnson, John C., Blairstown. (21)
 Johnson, Jotham C., 11 Tichenor, Newark. (7)
 Johnson, Samuel, Asbury Park. (13)
 Johnson, Walter B., 170 B'dway, Paterson. (16)
 Jonah, W. E., 1616 Pacific ave., Atlantic City. (1)
 Jones, Edward W., Layton. (19)
 Jones, Ferdinand, Millville. (6)
 Jones, J. Morgan, 2800 Boulevard, J. City. (9)
 Jones, Ralph R., Toms River. (15)
 Jones, William S., 301 Penn St., Camden. (4)
 Joy, J. Addison, 1920 Pacific ave., Atlantic City.
 Kain, William W., 5th and Pine Sts., Camden. (4)
 Kane, Charles J., 349 Grand, Paterson. (16)
 Kane, Thomas J., 349 Grand, Paterson. (16)
 Kaufman, Ernest, 55 New, Newark. (7)
 Keefe, Stephen J., 1063 E. Jersey, Elizabeth. (20)
 Keegan, Thomas J., 838 Grand St., Jersey City.
 Keenan, J. Herbert, 22 W. Jersey, Elizabeth. (20)
 Keim, William F., 7 Roseville Ave., Newark.
 Kelchner, William Irwin, 942 Cooper St., Camden.
 Keller, Frank J., 379 Totowa ave., Paterson. (16)
 Kensingler, William, 733 N. 27th St., Camden. (4)
 Kent, George R., 37 8th Ave., Newark. (7)
 Kent, Morton M., 231 N. Warren, Trenton. (11)
 Kerns, Francis J., 384 Central ave., Newark. (7)
 Kice, Henry W., Wharton. (14)
 Kimball, Paul T., Lakewood. (15)
 Kinch, Frederick A., Westfield. (20)
 King, Geo. E., Hud. Co. Asylum, Secaucus. (9)
 Kinmouth, William R., Farmingdale. (13)
 Kip, Henry, 90 Fair, Paterson. (16)
 Kipp, Charles J., 560 Broad St., Newark. (7)
 Kirk, Grant E., 1801 Broadway, Camden. (4)
 Kirkman, Leroy G., 256 Orange St., Newark. (7)
 Kitchen, Joseph M. W., 94 Prospect, East Orange.
 Kirsten, A. John, 287 Varick St., Jersey City. (9)
 Klein, Maurice I., 127 Wickliffe, Newark. (7)
 Knecht, Cyrus, Matawan. (13)
 Knight, Samuel R., Spring Lake. (13)
 Knowles, Francis E., 162 S. Orange av., S. Orange
 Koch, George J. P., 130 Beech, Paterson. (16)
 Koch, Louis A., 20 Orchard, Newark. (7)
 Koppel, Joseph, 244 Grove St., Jersey City. (9)
 Korneman, Henry A., 262 15th Ave., Newark. (7)
 Korngut, Samuel, 127 Bond, Elizabeth. (20)
 Kudlich, William L., 408 Hudson St., Hoboken.
 Kuehne, Richard, 1118 Summit ave., Jer. City. (9)
 Kumpf, Reba Lloyd, Bridgeton. (6)
 Kyte, Calvin F., 77 Garrison, Jersey City. (9)
 Laird, George S., Westfield. (20)
 Lake, William A., Erma. (5)
 Lallor, William S., 220 N. Warren, Trenton. (11)
 Lambert, Frederick E., 157 Ocean ave., J. City (9)
 Lamont, George F. M., 194 Clinton Ave., Newark.
 Lampson, Mortimer, 322 Pacific ave., J. City. (9)
 Lamson, William J., Summit. (20)
 Lane, Frank B., 528 Main St., East Orange. (7)
 Lansing, James B. W., Tenaflly. (2)
 LaRiew, Frederick J., Washington. (21)
 Lautmann, John, 297 4th St., Jersey City. (9)
 Laws, George C., Paulsboro. (8)
 Lawrence, Alfred, 1086 Elizabeth ave., Elizabeth.
 Lawrence, William H., Jr., Summit. (20)
 Leach, Alonzo L., Cape May City. (5)
 Leal, John L., 156 Ellison St., Paterson. (16)
 Leavitt, John F., 520 N. 3d St., Camden. (4)
 Lee, Bernard R., 901 Pacific ave., Atlantic City.
 Lee, Stephen G., 25 Halsted, East Orange. (7)
 LeFevre, Adrienne, Blackwood. (4)
 Lehlbach, Charles F., 537 High, Newark. (7)
 Leidy, Edward D., Flemington. (10)
 Leonard, Isaac E., 28 No. Iowa ave., Atlantic City.
 Levy, Julius, 298 Bank, Newark. (7)
 Lewis, Alfred A., Morristown. (14)
 Lewis, George Rae, 481 Summer Ave., Newark.
 Leyenberger, Samuel B. W., 98 3d Ave., Newark.
 Limeburner, Chas. A., 79 Danforth ave., J. C. (9)
 Lindley, Charles L., Lakewood. (15)
 Lippincott, A. Haines, 21 Broadway, Camden. (4)
 Lippincott, Jesse D., 304 Summer Ave., Newark.
 Litchfield, Paul N., 1100 Kaighn Ave., Camden.
 Livengood, Horace R., 1105 E. Jersey, Elizabeth.
 Livengood, Theodore F., 1105 E. Jersey, Elizabeth.
 Lockwood, Frank W., 237 Prospect, East Orange.
 Loeb, Alfred A., 347 Littleton Ave., Newark. (7)
 Long, Herbert W., 102 Jefferson, Newark. (7)
 Long, Isaac S., Freehold. (13)
 Long, Monroe D., Plainfield. (20)
 Long, William H., Jr., Somerville. (18)
 Loper, John C., Bridgeton. (6)
 Lore, Harry E., Fairton. (6)
 Loweree, Thomas W., 30 Hill, Newark. (7)
 Lowrey, James H., 79 Congress, Newark. (7)
 Lucas, Henry H., 192 Van Houten, Paterson. (16)
 Luck, Paul M. K., 174 Monroe, Passaic. (16)
 Luffbary, M. Jones, Glassboro. (8)
 Lummis, Marshall F., Holly Beach. (5)
 Lund, John L., 181 High, Perth Amboy (12)
 Luther, Calista V., 151 Scotland rd., So. Orange.
 Lyon, Leslie C., Magnolia. (4)
 Maas, Max A., 489 High St., Newark. (7)
 MacAlister, Wm. Wallace, 21 Church, Paterson.
 MacDowall, John L., 129 Smith, Perth Am. (12)
 Mace, Margaret, Anglesea. (5)
 MacKenzie, Thos. H., 528 E. State, Trenton. (11)
 Mackintosh, M. Alex., 237 Broadway, Paterson.
 Maclay, Joseph A., 239 B'dway, Paterson. (16)
 MacLaren, William S., Princeton. (11)
 MacMillan, Geo. W., Lakewood. (15)
 Macwithey, Amasa A., Riverdale. (14)
 Madden, E. H., Absecon. (1)
 Madden, T. W., 831 Haddon Ave., Collingswood.
 Madden, Walter, 324 S. Broad, Trenton. (11)
 Magennis, Bryan C., 81 Bridge, Paterson. (16)
 Maghee, James M., 7 Main St., W. Orange. (7)
 Magner, John J., 666 Jersey ave., Jersey City. (9)
 Mahaffey, Jesse L., 537 N. 7th St., Camden. (4)
 Mallalieu, Frank W., 16 Monticello av., Jersey C.
 Mallon, Peter S., Morris Plains. (14)
 Mancusi-Ungaro, L., 86 Mt. Prospect Ave., New'k.
 Marcy, Alex. Jr., Riverton. (3)
 Marcy, Alexander Sr., Riverton. (4)
 Marcy, Frederick W., 6th and Pine Sts., Camden.
 Marcy, John W., Merchantville. (4)
 Marcy, Virgil M. D., Cape May. (5)
 Mander, A. J., Millville. (6)
 Markley, Paul H., 515 Cooper St., Camden, (4)

- Marks, Edward G., 655 Kearny ave., Arlington.
 Marsh, Elias J., 600 Park ave., Paterson. (16)
 Marsh, Elias J., Jr., 24 Church, Paterson. (16)
 Marshall, Joseph C., 1517 Pacific av., Atlantic City.
 Marshall, Joseph C., Tuckahoe. (5)
 Marshall, Randolph, Tuckahoe. (5)
 Martin, Thaddeus P., 46 Spring, Trenton. (11)
 Martindale, J. Watson, 2501 Federal St., Camden.
 Martinetti, Carlo, 139 Centre, Orange. (7)
 Martland, William H., 1138 Broad, Newark. (7)
 Marvel, Emery, 811 Pacific ave., Atlantic City. (1)
 Marvel, Philip, 1616 Pacific ave., Atlantic City.
 Matthews, Henry E., 12 Hillside, Orange. (7)
 Matthews, William J., 1009 Garden St., Hoboken.
 Mayhew, Charles H., Millville. (6)
 Mayhew, Samuel D., Bridgeton. (6)
 McAlister, Alex., 582 Federal St., Camden. (4)
 McBride, Andrew F., 397 Main, Paterson. (16)
 McCabe, Thomas S., 234 Lafayette St., Newark.
 McClendon, Caesar P., 48 Fair, Paterson. (16)
 McCloughan, Harvey J., Newton. (19)
 McCormick, Daniel L., 253 Mulberry, Newark. (7)
 McCormick, Henry D., Verona. (7)
 McConnell, Joseph K., Cranford. (20)
 McCoy, John C., 292 B'dway, Paterson. (16)
 McDede, Frank, 908 Main, Paterson. (16)
 McElhinney, Dennis R., 626 Eliz. ave., Elizabeth.
 McLeroy, Lee, 925 Elizabeth ave., Elizabeth. (20)
 McFadden, George Howard, Hackensack. (2)
 McGill, John D., 16 Gifford ave., Jersey City. (9)
 McGlennon, Wm. B., 310 Central av., E. New. (9)
 McGuire, James J., 330 S. Broad, Trenton. (11)
 McKenzie, William H., 942 Broad, Newark. (7)
 McLaughlin, George E., 41 Crescent av., J. C. (9)
 McLean, John J., 430 Hoboken ave., J. City. (9)
 McLean, Thomas N., 1144 E. Broad, Elizabeth.
 McLoughlin, Thomas J., 558 Jersey ave., J. C. (9)
 McMurtrie, William A., Morristown. (14)
 McNamara, Thos. C., 613 Hudson St., Hoboken.
 McNenney, Claude E., 116 Mercer St., Jersey C.
 McVay, J. C., 707 Pacific ave., Atlantic City.
 McWilliam, John F., Somerville. (18)
 Mead, Sarah R., 16 James, Newark. (7)
 Mecray, James, Cape May City. (5)
 Mecray, Paul M., 405 Cooper St., Camden. (4)
 Megaro, Panerazio, M., 313 High, Newark. (7)
 Meigh, Josiah, Bernardsville. (18)
 Meizer, Martin S., 204 Madison av., P. Am. (12)
 Melcher, William P., Mt. Holly. (3)
 Mendenhall, Clinton D., Bordentown. (3)
 Menk, Paul E., 106 Market St., Newark. (7)
 Mercer, Archibald, 31 Washington, Newark. (7)
 Mercelis, Elizabeth, 17 Plymouth, Montclair. (7)
 Merrill, Charles F., 297 Central ave., Newark. (7)
 Merrill, John R., 15 Church, Paterson. (16)
 Merrill, William H., South Branch. (18)
 Merrins, Edward M., 29 William St., E. Orange.
 Metzger, Emma P. W., Riverside. (3)
 Meyer, Franklin L., 18 Warren St., Newark. (7)
 Meyer, William, 446 Clinton ave., W. Hob. (9)
 Mial, Leonidas L., Morristown. (14)
 Miller, H. Garrett, Millville. (6)
 Miller, John N., Newton. (19)
 Miller, William E., 1023 S. 8th St., Camden. (4)
 Mills, Clifford, Morristown. (14)
 Millsbaugh, Daniel T., 45 Totowa ave., Paterson.
 Mines, Marcus K., 532 West St., Camden. (4)
 Mitchell, Augustus J., 74 South, Newark. (7)
 Mitchell, Chas. H., 116 Centre, Trenton. (11)
 Mitchell, Henry, Asbury Park. (13)
 Mitchell, Winthrop D., 23 S. Grove, East Orange.
 Moenig, Joseph A., Park Ridge. (2)
 Mooney, John J., 554 Jersey Ave., Jersey City. (9)
 Moore, Edward H., Asbury. (21)
 Moore, Geo. R., 259 Hamilton ave., Trenton. (11)
 Moore, John, Sussex. (19)
 Moore, John D., 424 Franklyn, Bloomfield. (7)
 Moore, John H., Bridgeton. (6)
 Moore, William M., 79 Livingston av., N. B. (12)
 Montfort, Robert J., 1051 E. Jersey, Elizabeth.
 Morrill, James P., 10 Church, Paterson. (16)
 Morris, Clement, 75 Washington Ave., Newark.
 Morrison, Daniel L., 1 Elm Row, New B. (12)
 Morrison, Ephraim, Newton. (19)
 Morrison, John B., 97 Halsey St., Newark. (7)
 Mravlag, Victor, 1062 E. Jersey, Elizabeth. (20)
 Mulvaney, Edward, 485 Jersey ave., Jersey City.
 Murray, Eugene W., 91 Washington Ave., Newark
 Murray, William H., Plainfield. (20)
 Muta, Samuel A., Park Ave., West Orange. (7)
 Muttart, George W., 702 Ocean ave., Jer. City. (9)
 Nadler, Frederick C., 31 Green, Newark. (7)
 Nash, Albert B., 10 So. 13th, Newark. (7)
 Nash, Alfred B., Frenchtown. (10)
 Neare, Clifford R., 2 Hawthorne, E. Orange. (7)
 Neer, Henry C., Park Ridge. (2)
 Neer, Rush, 95 Bridge, Paterson. (16)
 Neer, William, 245 Broadway, Paterson. (16)
 Nelson, A., 105 Grand St., Jersey City. (9)
 Newcombe, Marcus W., Burlington. (3)
 Newman, Emanuel D., 81 New, Newark. (7)
 Newton, Anne B., 137 S. Orange ave., So. Orange.
 Newton, Richard C., 42 Church, Montclair. (7)
 Newton, William K., 379 Ellison, Paterson. (16)
 Nicholson, Joseph L., 400 Penn St., Camden. (4)
 Noble, Willis C., 55 S. Fullerton, Montclair. (7)
 Nolte, Henry W., 255 Mulberry, Newark. (7)
 North, Harry R., 284 Hamilton ave., Trenton. (11)
 North, James, 29 So. Tennessee av., Atlantic City.
 Norton, Horace G., 429 E. State, Trenton. (11)
 Norval, William A., 419 Main, Paterson. (16)
 Nuse, Edward F., 550½ Jersey ave., Jer. City. (9)
 Oakley, H. W., 800 Montgomery St., Jersey City.
 O'Connor, Jeremiah F., 85 Kearny ave., Kearny.
 O'Donnell, James, 82 Ward, Paterson. (16)
 Oestman, August W., 961 Summit av., J. City. (9)
 Ogden, B. Frank, Clayton. (8)
 Oliphant, Eugene T., Bridgeport. (8)
 Oliphant, Nelson B., 152 W. State, Trenton. (11)
 Oliver, David H., Bridgeton. (6)
 Opdyke, Ralph, 27 S. Fullerton, Montclair. (7)
 Osmun, Louis C., Hackettstown. (21)
 Osmun, Milton M., 611 Broadway, Camden. (4)
 Owen, Fred. Wooster, Morristown. (14)
 Paganelli, T. Richard, 401 Monroe St., Hoboken.
 Palm, Howard F., 614 N. 2d St., Camden. (4)
 Palmer, Gideon Howard, 11 Wakeman Ave., N'k.
 Parke, Henry, 9 Church, Paterson. (16)
 Parker, E. E., Pacific, cor Penn av., Atlantic City.
 Parker, Geo. H., 420 E. State, Trenton. (11)
 Parker, William J., 694 Bergen ave., J. City. (9)
 Parry, William C., Hainesport. (3)
 Parsell, Lewis B., Closter. (2)
 Parsonette, Victor, 132 W. Kinney St., Newark.
 Parsons, John C., 311 York St., Jersey City.
 Parsons, Richard H., Mt. Holly. (3)
 Partree, Homer T., Eatontown. (13)
 Paul, Frederick M., 562 High St., Newark. (7)
 Paxton, John P., 560 E. 28th, Paterson. (16)
 Payne, Joseph, Midland Park. (2)
 Pechin, Edward C., 311 N. 3d St., Camden. (4)
 Peck, Edward E., Bloomfield ave., Caldwell. (7)
 Pedrick, Charles D., Glassboro. (8)
 Pelouze, Percy S., 671 Springfield Ave., Newark.
 Pellett, Jackson B., Hamburg. (19)
 Perkins, James L., Cranford. (20)

- Petry, William, 325 S. Orange Ave., Newark. (7)
 Pettis, Albert, Plainfield. (20)
 Pettit, Alonzo, 116 W. Grand, Elizabeth. (20)
 Pezzè, Luigi, 280 4th St., Jersey City. (9)
 Phelan, Edward S., 18 South St., Newark. (7)
 Philhower, George P., Grant ave., Nutley. (7)
 Phillips, Cyrus B., Pitman Grove. (8)
 Physick, Emlen, Cape May City. (5)
 Pierson, Fred'k H., 340 Westminster av., Elizabeth.
 Pierson, Henry C., Roselle. (20)
 Pierson, H. Morton, Roselle. (20)
 Pierson, Stephen, Morristown. (14)
 Pierson, Theodore A., Hopewell. (11)
 Pike, Horace V., Marlboro Mills, Conn. (16)
 Pinder, David S., 203 Garden St., Hoboken. (9)
 Pinneo, Frank W., 199 Garside St., Newark. (7)
 Piskorski, Abdon V., 261 5th St., Jersey City. (9)
 Pittis, Harold, Lakehurst. (15)
 Pollak, Berthold S., 241 Grove St., Jersey City.
 Pollard, Joseph E., Chatham. (14)
 Pollard, William M., 25 So. Car. av., Atlantic City.
 Poole, Louis, 521 Palisade ave., W. Hoboken. (9)
 Poor, Daniel W., 27 Ridge St., Orange. (7)
 Porteous, E. J., 811 Pacific ave., Atlantic City. (1)
 Porter, Katherine, 149 William, Orange. (7)
 Potter, Palmer A., East Orange. (7)
 Potter, Robert C., 34 Centre St., Newark. (7)
 Powell, William R., 702 Market St., Camden. (4)
 Pratt, John E., Dumont. (2)
 Pratt, William H., 406 N. 6th St., Camden. (4)
 Presley, Sophia, 333 N. 7th St., Camden. (4)
 Price, Franklin C., Imlaystown. (13)
 Price, J. Cole, Branchville. (19)
 Price, Nathaniel G., 62 Boston, Newark. (7)
 Price, T. T., Tuckerton, N. J. (3)
 Prickett, Elmer D., Mt. Holly. (3)
 Probasco, John B., Plainfield. (20)
 Probasco, Norman H., Plainfield. (20)
 Proctor, James W., Englewood. (2)
 Prout, Thomas P., Summit. (20)
 Purdy, Chas. H., 312 Montgomery St., Jersey City.
 Pyle, Wallace, 612 Bergen St., Jersey City. (9)
 Quinby, William O'G., 80 Columbia, Newark. (2)
 Quinn, Stephen T., 326 So. Broad, Elizabeth. (20)
 Rafferty, Peter J., Red Bank. (13)
 Ramsay, Wm. E., 193 High, Perth Amboy. (12)
 Randall, Charles H., 50 3d Ave., Newark. (7)
 Ranson, Briscoe B., Jr., Maplewood. (7)
 Raughley, William C., Berlin. (4)
 Read, Clinton H., 567 S. Warren, Trenton. (11)
 Read, Joshua W., 82 Park Pl., Newark. (7)
 Reading, George E., Woodbury. (8)
 Reason, John J., Carteret. (20)
 Rector, Joseph M., 307 York St., Jersey City. (9)
 Reddan, Martin W., 113 W. State, Trenton. (11)
 Reed, Eugene L., 920 Pacific ave., Atlantic City.
 Reed, J. W., Absecon. (1)
 Reed, Thomas K., 22 No. Penn. av., Atlantic City.
 Reese, James M., Phillipsburg. (21)
 Reiley, Edward A., 20 So. Tenn. av., Atlantic City.
 Reilly, John P., 215 Elizabeth ave., Elizabeth. (20)
 Reich, Siegmund A., 959 Summit ave., Jersey City.
 Reynolds, Walter, 27 So. Indiana av., Atlantic City
 Richardson, Emma M., 581 Stevens St., Camden.
 Ribbans, R. C., 15 Warren St., Newark. (7)
 Rice, J. Warren, 301 George, New Bruns. (12)
 Richman, Edward M., 252 Mulberry, Newark. (7)
 Ricord, Philip, 268 Bank, Newark. (7)
 Ridgeway, Geo. M., 140 W. State, Trenton. (11)
 Ridgway, Wm. F., 1200 Pacific ave., Atlantic City.
 Riordan, John, Carlstadt. (2)
 Risk, J. Boyd, Summit. (14)
 Ritter, John J., 16 Smith, Paterson. (16)
 Riva, Ferdinand E., 47 Bayard, New Bruns. (12)
 Roberts, D. Edgar, Keyport. (13)
 Roberts, Joseph E., 401 Broadway, Camden. (4)
 Robertson, Samuel E., 21 Walnut, Newark. (7)
 Robinson, Benjamin D., 265 Mulberry, Newark.
 Robinson, Silas E., Waldwick. (6)
 Robinson, Manning N., 159 Elm, Newark. (7)
 Robinson, William D., 12 S. Grove, East Orange.
 Roden, Hugh P., 345 Washington, Newark. (7)
 Roeber, William J., 104 Spruce, Newark. (7)
 Rogers, Benjamin H., 213 B'dway, Paterson. (16)
 Rogers, Edward B., Collingswood. (4)
 Rogers, George A., 1 Wallace, Newark. (7)
 Rogers, Richard R., Jr., 610 Perry, Trenton, (11)
 Rogers, Richard R., 110 E. Hanover, Trenton. (11)
 Rogers, Robert H., 64 S. 10th, Newark. (7)
 Rose, Horace L., 842 Federal St., Camden. (4)
 Rose, William Walter, 2 Myrtle Ave., Newark.
 Rosenkrans, James H., 826 Hudson St., Hoboken.
 Rosensohn, William, 310 Dodd, East Orange. (7)
 Ross, Alexander S., 608 Benson St., Camden. (4)
 Rostow, Clarence, 655 High, Newark. (7)
 Ruch, Valentine, Jr., Englewood. (2)
 Rue, Henry B., 931 Bloomfield St., Hoboken. (9)
 Runyon, Mefford, 110 Irvington ave., So. Orange.
 Russell, Anthony B., 54 William, East Orange.
 Ryan, John N., 136 Jefferson, Passaic. (16)
 Ryerson, John G., Boonton. (14)
 Sandt, Frank R., 466 Park ave., Paterson. (16)
 Sandy, Wm. C., P. O. Box 258, Trenton. (11)
 Sauer, Ferdinand W., 314 Varick, Jersey City. (9)
 Saulsberry, Charles E., Mays Landing. (1)
 Saunders, Orris W., 1813 S. 6th St., Camden. (4)
 Scammell, Frank G., 413 E. State, Trenton. (11)
 Schaufler, William Gray, Lakewood. (15)
 Schellenger, Ed. A. Y., 429 Cooper, Camden. (4)
 Scheppach, Harry A., 164 Bergen St., Newark. (7)
 Schlemm, Richard, 111 Palisade ave., T. of U. (9)
 Schlichter, Chas. H., 1053 Elizabeth av., Elizabeth.
 Schneider, Charles A., 44 Hillside Pl., Newark.
 Schoening, Gustave A., 223 Perry, Trenton. (11)
 Schopfer, William A., 43 Read, Newark. (7)
 Schureman, Charles A., 22 Hill, Newark. (7)
 Schwarz, Emanuel, 561 High, Newark. (7)
 Scott, Elmer A., Asbury Park. (13)
 Scott, George, 1109 Pacific ave., Atlantic City. (1)
 Scribner, Charles H., 82 Ward, Paterson. (16)
 Sealy, Edward, 369 Washington, Newark.
 Seeds, John B., 495 Centre, Trenton. (11)
 Seibert, Edgar C., 436 Main, Orange. (7)
 Seidler, William F., 21 Ferry, Newark. (7)
 Seidman, Marcus, 580 High, Newark. (7)
 Sell, Frederick W., Rahway. (20)
 Senseman, Theo., 101 St. Charles pl., Atlantic City
 Sewall, Millard F., Bridgeton. (6)
 Seward, Frederick H., Madison. (14)
 Sexsmith, Geo. H., 719 Ave. C, Bayonne. (9)
 Shailer, Sumner, 271 Clinton Ave., Newark. (7)
 Shangle, Milton A., 1143 E. Jersey, Elizabeth.
 Shannon, Patrick A., 133 Albany, N. Bruns. (12)
 Sharp, Ezra B., 412 Broadway, Camden. (4)
 Sharp, Jennie S., 504 Broadway. (4)
 Sharpe, Edward S., 30 No. Georgia av., Atlantic C
 Shaul, Frederick G., 70 Washington, Bloomfield.
 Shaw, Harry E., Long Branch. (13)
 Shaw, Jos. B., 119 S. Warren, Trenton. (11)
 Sheiner, L. H., 441 W. 13th St., West New York.
 Sheppard, Frank R., Millville. (6)
 Shepherd, Irenaeus M., 188 S. Broad, Tren. (11)
 Sherman, Elbert S., 191 Summer Ave., Newark.
 Sherk, Henry H., 2647 Westfield Ave., Camden.
 SHERA, George W., 489 Jersey ave., Jer. City. (9)
 Sherron, Clifford M., Salem. (17)

- Shick, William F., 31 Park, Newark. (7)
 Shimer, Arthur B., 606 Pacific ave., Atlantic City.
 Shipp, William H., Bordentown. (3)
 Shirrefs, Russell A., 1158 E. Jersey, Elizabeth.
 Sickenberger, Ernest F., Rutherford. (2)
 Silk, Charles I., 422 State, Perth Amboy. (12)
 Silvers, Elihu B., 55 Seminary ave., Rahway. (20)
 Simmons, M. Herbert, 225 Cleveland, Orange. (7)
 Simmons, Wesley Grant, Swedesboro. (8)
 Simpson, Maxwell S., Middle Valley. (14)
 Sinclair, Robert R., Westfield. (20)
 Slack, Clarence M., 50 Livingston av., N. B. (12)
 Slaughter, J. M., Wildwood. (5)
 Slocum, Harry B., Long Branch. (13)
 Small, Alexander H., Riverside. (3)
 Smalley, Mahlon C., Gladstone. (18)
 Smith, Anna L., 50 N. Fullerton Ave., Montclair.
 Smith, Arthur L., 62 Bayard, New Bruns. (12)
 Smith, Charles B., Washington. (21)
 Smith, D. Winans, 201 Walnut, Newark. (7)
 Smith, Houghton, 1007 Division, Trenton. ((1)
 Smith, John F., Salem. (17)
 Smith, J. Anson, Blackwood. (4)
 Smith, Leonard H., 6 N. Munn Ave., E. Orange.
 Smith, Thomas J., Bridgeton. (6)
 Snyder, Sharps M., Greenwich. (6)
 Somers, M. LeRoy, 1910 Pacific av., Atlantic City.
 Sommers, Geo. N. J., 229 Perry, Trenton. (11)
 Souder, Lewis R., 19 Victoria ave., Atlantic City.
 Sparks, U. S. Grant, Mantua. (8)
 Spence, Henry, 681 Bergen ave., Jersey City. (9)
 Spencer, Ira T., Main, Woodbridge. (12)
 Sprague, Edward W., 108 Washington St., New'k.
 Sprenger, William A., 518 Broadway, Camden. (4)
 Sproul, Obadiah H., Flemington. (10)
 Squier, Manning F., 234 Harrison av., Har. (9)
 Staehlin, Edward, 493 High, Newark. (7)
 Stage, Jacob S., 95 Jefferson, Newark. (7)
 Stahl, Alfred, 550 Bergen St., Newark. (7)
 Stanwood, Robert G., 117 N. 6th St., Newark. (7)
 Steadman, Eban T., 635 Wash'gton St., Hoboken.
 Steadman, Walter, 706 Bloomfield St., Hoboken.
 Steiner, Edwin, 1 Sterling, Newark. (7)
 Stellwagen, Fred B., 28 Clifton ter., Weehawken.
 Stephens, David, Addison, N. Y. (12)
 Stern, Arthur, 218 E. Jersey, Elizabeth. (20)
 Stevens, Pliny F., 853 Ave. C, Bayonne. (9)
 Stevenson, John R., Haddonfield. (4)
 Stevenson, Wm. D., 40 S. Clinton ave., Trenton.
 Stewart, James M., 181 Van Houten, Paterson.
 Stewart, W. Blair, 43 So. N. Car. av., Atlantic City
 Stilwagon, Philip E., Bridgeport. (8)
 Stillwell, Aaron L., Somerville. (18)
 Stites, Ellsmore, Bridgeton. (6)
 Stites, Joseph A., Springfield. (20)
 Stoddart, Francis S. J., Rydal, Pa. (3)
 Stokes, Joseph, Moorestown. (3)
 Storm, Walter, Hope (21)
 Stout, Daniel, Berlin. (4)
 Stout, Harry A., Wenonah. (8)
 Stanger, Samuel F., Harrisonville. (8)
 Strasser, August A., 115 Beach St., Arlington.
 Stratton, William M., Woodbury. (8)
 Strock, Daniel, 818 Federal St., Camden. (4)
 Stroud, Frank G., Moorestown. (3)
 St. John, David, Hackensack. (2)
 Stinson, Richard, 158 Broadway, Paterson. (16)
 Sullivan, John J., 51 Passaic ave., Passaic. (16)
 Sullivan, Michael J., Englewood. (2)
 Sulouff, S. Henry, 10 W. Hamilton Pl., J. City (9)
 Summerill, John Morris, Pennsgrove. (17)
 Surnamer, Isaac, 89 Bridge, Paterson. (16)
 Sutphen, Carl E., 181 Roseville Ave., Newark. (7)
 Sutphen, Edward B., 997 Broad, Newark. (7)
 Sutphen, Theron Y., 997 Broad, Newark. (7)
 Sutton, Edward, German Valley. (14)
 Suydam, John L., Jamesburg. (12)
 Swayze, Alvah A., Hackensack. (2)
 Swiney, Merrill A., 341 Avenue C, Bayonne. (9)
 Symmes, Henry C., Cranbury, (12)
 Synnott, Martin J., 34 S. Fullerton Ave., Montclair
 Taggart, T. D., 25 So. Ill. ave., Atlantic City. (1)
 Tarbell, Henry A., 28½ Thomas, Newark. (7)
 Tattersall, Joseph, 1042 Main, Paterson. (16)
 Taylor, H. Genet, 305 Cooper St., Camden. (4)
 Taylor, John, 1211 Grand ave., Asbury Park. (13)
 Taylor, John L., Boonton. (14)
 Taylor, Sewell O. B., Millstone. (18)
 Taylor, Walter A., P. O. Box 258, Trenton. (11)
 Teeter, Charles E., 418 Orange, Newark. (7)
 Teimer, Theodor, 450 High, Newark. (7)
 Temple, Arthur H., 164 Jefferson, Passaic. (16)
 TenEyck, John D., Franklin Park. (18)
 Terhune, Percy H., 162 Gregory av., Passaic. (16)
 Terribery, George W., 146 B'dway, Paterson.
 Thompson, Charles H., Belmar. (13)
 Thompson, John R. C., Bridgeton. (6)
 Thompson, Otto C., Cassville. (15)
 Titus, Charles W., 487 Orange, Newark. (7)
 Titus, Geo. E., Hightown. (11)
 Todd, Francis H., 218 Broadway, Paterson. (16)
 Tomlin, H. H., Wildwood. (5)
 Tomlinson, Joseph, Bridgeton. (6)
 Tomlinson, Roland D., Plainfield. (20)
 Tomlinson, Thomas H., Plainfield. (20)
 Towle, Henry A., 16 Halsey, Newark. (7)
 Townsend, Mary E., 13 So. Pa. av., Atlantic City.
 Townsend, Theodore E., Westwood. (2)
 Tracy, George T., Beverly. (3)
 Trainor, James H., 131 Elm, Newark. (7)
 Traub, Paul, Bordentown. (3)
 Treganowan, Ambrose, Main, South Amboy. (12)
 Tuers, George E., 12 Church, Paterson. (16)
 Tunison, G. Orlando, Oxford. (21)
 Turner, William F., 562 Jefferson ave., Elizabeth.
 Tutschulte, Ernest, 149 Polk, Newark. (7)
 Twinch, Sidney A., 598 Broad, Newark. (7)
 Tyrrell, George W., 222 State, Perth Amboy. (12)
 Underwood, Charles F., 259 Mt. Prospect Ave., N.
 Utter, Sylvester, 12 Church, Paterson. (16)
 Vail, Herbert B., 282 Washington ave., Belleville.
 Vail, James Lindley, Cranford. (20)
 Van Alstyne, William B., Westfield. (20)
 Vanderbeek, Andrew B., 174 B'dway, Paterson.
 Van Dwyne, Sarah E., 247 Belleville Ave., Newark.
 Van Duyn, William B., 133 Perry St., Trenton. (11)
 Van Dyke, Benj. S., 101 Eaton Pl., East Orange.
 Van Dyke, Joseph S., Palisades Park. (2)
 Van Ess, John, 53 Bridge, Paterson. (16)
 Van Gaasbeek, Harvey D., Sussex. (19)
 Van Horn, Alfred F., Plainfield. (20)
 Van Horne, Byron G., Englewood. (2)
 Van Horne, Carrie H., Englewood. (2)
 Van Noort, Frank J., 393 Main, Paterson. (16)
 Van Riper, A. Ward, 207 Main av., Passaic. (16)
 Van Riper, Cornelius, 207 Main av., Passaic. (16)
 Van Sciver, John E. L., 445 S. 4th St., Camden.
 Van Syckle, Alva C., Hackettstown. (21)
 Van Wagenen, George A., 101 N. 6th, Newark.
 Vaughan, Harry, Morristown. (14)
 Vigna, Fortunato, 35 Ward, Paterson. (16)
 Vinton, Maria M., 15 Halsted pl., East Orange.
 Voelbel, Benj. H., So. Orange ave., Vailsburgh.
 Voorhees, E. R., M. D. C., Somerville. (18)
 Voorhees, Nathaniel W., 297 N. Broad, Elizabeth.
 Voorhees, Shepard, Newton. (19)

- Von Deestin, H. T., 619 Garden St., Hoboken. (9)
 Vreeland, Clarence L., 174 Ocean ave., J. C. (9)
 Vreeland, George W., 127 Hamburg av., Paterson.
 Vreeland, Hamilton, 78 Summit ave., Jersey City.
 Vreeland, William N., 2 Park, Jersey City. (9)
 Vroom, William L., Ridgewood. (2)
- Waddington, Benj. A., Salem. (17)
 Wade, John W., Millville. (6)
 Wagner, Otto, 1051 Elizabeth ave., Elizabeth. (20)
 Wainright, J. M. B., 315 Varick St., Jersey City.
 Waite, George N., 569 High, Newark. (7)
 Walling, Wm. H., 1209 Pacific ave., Atlantic City.
 Wallace, Henry, 201 Ridgewood ave., Glen Ridge.
 Wallhauser, Henry J. F., 47 New, Newark. (7)
 Walschied, A. John, 309 Fulton, T. of Union. (9)
 Walters, John, Wharton. (14)
 Ware, James W., 977 Avenue C, Bayonne. (9)
 Ward, Albert H., 404 Totowa ave., Paterson. (16)
 Ward, Alfred W., Closter. (2)
 Ward, Edwin M., 17 Park pl., Bloomfield. (7)
 Ward, Gertrude P., 41 Park pl., Bloomfield. (7)
 Ward, John W., P. O. Box 258, Trenton. (11)
 Ward, William J., 438 Warren, Newark. (7)
 Warman, David, 239 Chestnut ave., Trenton. (11)
 Warncke, Frank, 310 First ave., Elizabeth. (20)
 Warner, William B., Red Bank. (13)
 Warner, W. H. Alonzo, 400 Central Ave., E. Or.
 Warren, George L., 77 Houston, Newark. (7)
 Warren, Wm. H., 863 Mt. Prospect ave., Newark.
 Washington, Walter S., 8 Washington Pl., New'k.
 Waters, Chas. H., 50 W. Hanover, Trenton. (11)
 Watson, W. Perry, 116 Gifford Ave., Jersey City.
 Way, Eugene, Dennisville. (5)
 Way, Julius, Cape May Court House. (5)
 Webster, D. King, Cape May Court House. (4)
 Webner, Frederick C., 96 Clinton Ave., Newark.
 Webster, J. Bart., 132 S. Maryland av., Atlantic C.
 Weeks, David F., 326 W. State, Trenton. (11)
 Weeks, Henry M., Skillman. (18)
 Weil, Edwin M., 225 5th St., Jersey City. (9)
 Weiss, Louis, 227 S. Orange Ave., Newark. (7)
 Welshman, Geo. O., 150 Summer av., Newark. (7)
 Welch, George T., Passaic. (13)
 Welch, Joseph T., Long Branch. (13)
 Wells, Jos. M., 922 Edgewood ave., Trenton. (11)
 West, Edgar L., 274 Hamilton ave., Trenton. (11)
 West, Nevin B., Egg Harbor City.
 Westcott, William A., Berlin. (4)
 Wheeler, Harry S., Whippany. (14)
 Wherry, Elmer G., 325 Clinton Ave., Newark. (7)
 White, Frank H., Hackensack.
- White, George D., 459 Fairmount ave., J. City. (9)
 White, J. Orlando, 329 Cooper St., Camden. (4)
 White, J. T., 1198 Haddon Ave., Camden. (4)
 White, Wm. H., 451 Franklyn, Bloomfield. (7)
 Whitehead, Rufus B., 310 First ave., Elizabeth.
 Whitehorne, Henry B., Grove ave., Verona. (7)
 Whitmore, Walter S., Red Bank. (13)
 Wickman, Albert, 325 Washington, Newark. (7)
 Widmer, Henry R., 516 Clinton Ave., Newark.
 Wigg, Cuthbert, Boonton. (14)
 Wilbur, George F., Asbury Park. (13)
 Wilbur, Wm. L., "Aleda," Hanover st., Tren. (11)
 Wild, Frederick A., Bound Brook. (18)
 Wilkinson, George W. V., Morristown. (14)
 Wills, Joseph H., 229 N. 3d St., Camden. (4)
 Wilson, Charles W., Vineland. (6)
 Wilson, Howard A., Woodbury. (8)
 Wikoff, James Holmes, Princeton. (11)
 Wilson, John G., 186 High, Perth Amboy. (12)
 Wilson, Norton L., 410 Westminster av., Elizabeth
 Wilson, Stacy M., Bridgeton. (6)
 Wilson, W. Stockton, 96 Montclair Ave., Newark.
 Wilkinson, George H., Moorestown. (3)
 Williams, Charles M., Washington. (21)
 Winans, Joseph C., St. Michael's Hospital, New'k.
 Wingender, Wendell P., 800 Market St., Camden.
 Wintersteen, J. Boone, Moorestown. (3)
 Woelfle, Henry E., 75 Bowers St., Jersey City. (9)
 Wolfe, William J., Chatham. (14)
 Wolff, Ferdinand C., 1136 Garden St., Hoboken.
 Wolfson, Joseph, 95 Mercer St., Jersey City. (9)
 Wood, Orran A., Magnolia. (4)
 Woodruff, Stanley R., 22 W. 22d St., Bayonne.
 Woods, A. Lincoln, Main, South River. (12)
 Woolbert, R., 26 N. Del. ave., Atlantic City. (1)
 Woolley, Scudder J., Long Branch. (13)
 Woolston, Elijah B., Marlton. (4)
 Worl, Edward E., 271 High, Newark. (7)
 Wormley, James A., 83 New, Newark. (7)
 Wort, Fred. J., Jr., 102 Clinton ave., Newark. (7)
 Wrightson, James T., 25 Walnut, Newark. (7)
 Wyckoff, J. Talmage, Leonia. (2)
 Wyler, Max., Fort Lee. (2)
- Yard, Pearson W., 727 S. Broad, Trenton. (11)
 Yates, John S., 79 Bridge, Paterson. (16)
 Young, Charles, 23 E. Kinney, Newark. (7)
 Young, Joseph C., 964 Broad, Newark. (7)
 Young, Peter C., Ringoes. (10)
- Zabriskie, Samuel J., Westwood. (2)
 Zeglio, Peter J., North Plainfield. (18)

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 3. ORANGE, N. J., SEPTEMBER, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

WHEN AND WHEN NOT TO OPERATE IN RUPTURED EXTRA-UTERINE PREGNANCY.*

By J. S. Baer, M. D., Camden, N. J.

The physician is seldom placed in so trying a position as when called to a case of ruptured extrauterine pregnancy, for he is confronted by a condition involving the gravest responsibility and requiring the finest and most accurate judgment to deal with it properly. I bring this subject before you, hoping that in its discussion some ideas may be advanced which will help us to deal with these cases successfully, and to keep the subject alive so that the general physician who is usually the first on the ground, may be kept alert as to the cause of the symptoms.

The best time to operate in extrauterine pregnancy is before rupture has taken place. But, unfortunately, the condition is seldom recognized before this calamity has occurred. Therefore, for practical use, the point we should discuss is, "When shall operation be done after rupture has taken place?" Shall this be done at once, as soon as the diagnosis is made? I say, yes, nearly, but not quite always. Now and then a condition of such profound shock exists that immediate operation would be fatal and where a little waiting might save life.

I will endeavor to illustrate this by citing a few cases which have occurred in my practice. When the patient is in profound collapse, absolutely pulseless, colorless, suffering from air hunger, covered with a cold, clammy sweat, it would be folly to resort to

operative measures for her relief. If she has not enough vitality to rally, she would surely die from the added shock of operation, as will be shown by the history of some of the following cases. She should be closely watched, hour by hour, and carefully stimulated until reaction has taken place. Then operative measures may be undertaken with greater expectation of a successful result. If some time has elapsed since the first attack and the blood has become encapsulated and the patient is in good condition, coagulation having taken place forming a pelvic hematocele, it is good practice to make a vaginal incision, turn out the clots and drain by gauze packing, always being prepared, however, to perform abdominal section in cases of severe hemorrhage through the vaginal incision. I did this in three cases, saving all three patients; but in another case death resulted from hemorrhage, through error in judgment in treating it in this way.

Mrs. C., aged 30; one child; had always enjoyed good health. Missed one period. On the morning of ———— arose at 5 A. M., feeling well. At 7 o'clock, while combing her hair, she gave a sharp cry, fell to the floor and was found apparently dead. She was placed upon the bed and her physician sent for. At 11 A. M. I saw her, in consultation, and found her in collapse. The radial pulse could not be felt. There was extreme pallor and sweating. On account of her extremely bad condition, I advised waiting for a few hours for return of vitality enough for operation. External heat with moderate internal stimulation was advised. In a few hours a slight improvement had taken place. I then decided to operate at once, hoping that this would give the patient her last chance for life. In-

* Read at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

cision was made in the median line. The vessels were clamped at the uterine and pelvic side of the broad ligament. Intravenous infusion of salt solution was started, together with hypodermics of strychnine, ether, etc. Our efforts were futile, the patient dying on the table. Rupture of the left tube had taken place within the folds of the broad ligament. The latter had also ruptured, permitting the blood to escape into the peritoneal cavity, which contained about all the blood there had been in the body. There was an opening in the posterior fold of the broad ligament admitting two fingers. This patient evidently was beyond the aid of surgery, but the case serves to illustrate the futility of operation during such profound shock.

Mrs. H., aged 42, had always enjoyed good health. She had one child nineteen years previously; labor normal. Three years ago she had a miscarriage at the third month. Soon after this I first saw her. She was septic and a foul-smelling placenta was delivered from the uterus. Her temperature became normal within twenty-four hours and she made a rapid recovery. I did not see her again until three years later, when she called at my office, stating that she had missed two periods, but did not think that she was pregnant because of the absence of morning nausea and vomiting which had always been present in former pregnancies. On the morning of the second day following, I was sent for hurriedly and found her suffering from severe pain in the left lower abdomen. She stated that she had risen early to attend to her household duties and that while cooking breakfast she was seized with a severe pain in the left side and fell over in a faint. She had also nausea and vomiting. She was placed in bed and I found her with a pulse below a hundred, of good volume, temperature and respiration normal. There was no pallor. She was relieved of her pain by a hypodermic of one-quarter grain of morphia. Vaginal examination revealed nothing definite except a sense of fullness in the left pelvis. I called again in the afternoon and explained to her that the condition was one of extrauterine pregnancy, and advised immediate operation. This was refused. She was ordered to remain in bed and her dangerous condition explained to her. The next morning she arose as usual and, while lifting a mattress, had another attack, not so severe. I again advised operation, and begged and plead with her to submit, but she refused. I then asked for a consultation and threat-

ened to withdraw from the case. The next afternoon Dr. B. F. Baer, of Philadelphia, saw her and concurred with me in the necessity for immediate operation. She promised to go to the hospital, but she had not appeared when I arrived that evening, and I gave up in disgust. They again sent for me the next morning when she had another attack, with a weak pulse of 120, some pallor and faintness. Vaginal examination revealed the presence of fluid in Douglas' pouch. She then realized her critical condition and consented to operation. She was immediately sent to the hospital. Before she could be prepared she had another hemorrhage and was in a state of profound collapse. I told her husband that it was too late, but he begged me to do something for her. I made an incision and clamped the vessels. Stimulation had already been started. Rupture had occurred in the upper portion of the tube in the middle third and the abdomen was full of blood. The specimen was ligated and removed. The abdomen was cleansed and closed. She never reacted, and died about twelve hours afterward. Early operation would undoubtedly have saved her. When she was in collapse I should have waited for possible reaction, when a more fortunate result might have been obtained.

Miss A. E.; aged 20; a Russian Jewess; had been in this country only two months. I was called by her physician to see this patient on the morning of October 29, 1906. He had made a diagnosis of ruptured extrauterine pregnancy. She was found in a small, cold room, in a condition of profound collapse, colorless, pulseless and death seemed imminent. I regarded the case as a hopeless one, but decided to give her the last chance, and therefore had her sent to the hospital. When she arrived her temperature was 96½ and pulse scarcely perceptible. The pulse next morning was 110; temperature 97; evening temperature 99; pulse 94. There was very little pallor. Preparation for operation next morning was ordered, but upon reaching the hospital her friends had left word that operation would not be permitted. Another day was appointed, but consent could not be obtained. On the fourth day a decidual membrane was expelled, forming a perfect cast of the uterine cavity. About two o'clock in the morning of the seventh day I was hastily summoned to the hospital and found the patient collapsed and colorless. She died half an hour later.

This case, perhaps, best illustrates the

point of waiting for reaction. During the week she seemed to be in a perfectly normal condition. She could almost certainly have been saved had her friends not interfered.

Mrs. C., aged 30; missed one period. Several weeks later, about five o'clock in the evening, she was seized with a sharp pain in the left ovarian region, accompanied, as she stated, with a sensation as though something had given way, obliging her to lie down. The pain subsided and after several hours she felt very much better. About four o'clock the next morning she had another attack, causing faintness and pallor, and her physician was called who recognized the condition. About ten o'clock I found her in a condition of profound collapse. There was no radial pulse and she was blanched. The abdomen was somewhat swollen and tender. Vaginal examination revealed a mass to the left of the uterus, with evidence of fluid in Douglas' pouch. The surroundings were such that it was thought safer to remove her to the hospital for operation. After her arrival there I considered her beyond help, but at the earnest solicitation of her husband and doctor, an effort was made to save her. Median incision was made and the vessels clamped. Rupture of a six weeks' sac had occurred in the outer third of the tube. The mass was ligated and removed. The abdomen, which was full of blood, was cleansed and closed. Stimulation by hypodermoclysis and hypodermics was under way. Infusion of salt solution was tried, but the fluid could not be made to enter the vein. The patient was put to bed, but never reacted, dying some four hours later. Perhaps a few hours' waiting might have turned the tide in her favor. These cases obviously illustrate when not to operate.

Mrs. S., aged 35; three children; labors and puerperium normal. Previous to birth of last child she had a miscarriage at the third month. No trouble followed. On January 20, 1907, she called at my office, saying that she had missed two periods and complained of pains in the lower abdomen similar to those she had in her former miscarriage. Upon examination the uterus was found enlarged and the cervix was larger and softer than normal. The os was somewhat patulous, admitting the tip of the index finger; there was also slight bleeding, with some dark, blood-tinged mucus. No mass was felt at this time, but there was felt a sense of fullness to the left. It was thought abortion threatened, and she was advised to go to bed. I saw her each day,

with no change of symptoms, until early on the morning of the 24th. I was called hurriedly and found her suffering great pain, with nausea and vomiting, and free bleeding from the vagina, with some faintness. At this time an elongated mass was found posterior and to the left, which had not been felt before. A diagnosis of tubal pregnancy was made and immediate operation urged. The patient was at once sent to the hospital, and as soon as she could be prepared operation was done. Upon incision through a very fat abdomen the left tube and ovary were removed; the tube with very thin walls was distended to about two inches in diameter and four inches in length. There was some blood oozing from the fimbriated extremity. A few small dark clots were found in the pelvis. The patient made a smooth recovery and is now well.

Mrs. P., aged 37; multipara. Was called to see this patient in consultation, about eleven o'clock on the night of April 21st, 1907. She had missed one period. About six o'clock that evening she was seized with a severe pain in the left lower abdominal region, accompanied by a feeling of faintness and a bloody vaginal discharge containing shreds. About three hours later she had another attack, during which she fainted and showed distinct evidence of shock, with pallor, subnormal temperature, rapid and weak pulse. Her physician had made a diagnosis of ruptured extrauterine pregnancy, with which I concurred. As her condition was not so grave as to contraindicate immediate operation, this was advised. The patient begged me to wait until to-morrow. I explained to her the gravity of the situation and that to-morrow might never come for her if she did not submit to operation. She was removed to the hospital and as soon as preparation could be made she was operated upon. Upon opening the abdomen a large quantity of fluid and clotted blood was found. Rupture of a three to four weeks' gestation sac was found in the isthmus of the tube, about an inch from the left uterine cornu. The tube and ovary of that side were ligated and removed. The patient made an uninterrupted recovery and left the hospital on the twentieth day.

Mrs. P., aged 26; always suffered from dysmenorrhœa previous to birth of her child, which occurred one year and a half ago. Labor and puerperium normal. Menstruation began thirteen months later and continued at regular intervals for three months. Four weeks later began to suffer

from morning nausea and vomiting and believed herself pregnant. One month still later, while out driving, she was taken with profuse bleeding from the vagina. On the next evening she appeared at my office, giving the above history. Upon examination the uterus was found enlarged to the size of about a four weeks' gestation. The cervix was softened. To the right an elongated mass was found, quite tender to the touch, and it felt as though a moderate degree of force might rupture it. She was ordered to bed and her husband, who is a physician, asked to watch her closely and inform me of any untoward symptoms. The following night she had an attack of pain in the lower abdomen, not very severe, however, accompanied by a slight metrorrhagia. I saw her again on the following day and found no change except that the mass seemed somewhat larger. A diagnosis of extrauterine tumor, with a possible normal pregnancy, was made, with a strong leaning toward a view that extrauterine pregnancy existed. I advised immediate operation because if this were true the woman was in constant danger of losing her life from rupture and hemorrhage. There was an extrauterine tumor present in a pregnant woman, and she was safer without it. The husband and patient were both anxious for operation, and it was made that day. The uterus was found as described above. Occupying the right pelvis was a kidney-shaped cyst of the ovary with very thin walls about the size of a small orange. The tube was normal except that it contained several sharp convolutions. The mass was ligated and removed. Who will say that the patient is not better off than if I had not removed the tumor?

These cases illustrate when to operate.

DISCUSSION.

Dr. B. F. Baer, Philadelphia.—The author of the paper which has just been read is entitled to great credit for his courage in operating on some of the cases reported, and he is entitled to even more credit for bringing them before us,—for his report of the deaths, which is often more valuable than that of the recoveries. He has stated briefly, but very forcibly, his belief that the time to operate for extrauterine pregnancy is as soon as the diagnosis has been made. I can endorse that fully, provided the diagnosis has been made before the patient is in profound collapse from hemorrhage, or after she has rallied from the shock. As he has said in relating his last case, it is wise to operate sometimes, even before the diagnosis is made certain that a perceptible extrauterine tumor is extrauterine pregnancy.

The case that he has just recited was one in which some of the signs of tubal pregnancy were

present. There was slight metrorrhagia accompanied with pain, cramplike in character. Examination revealed a tumor, occupying the position of the ovary and Fallopian tube. The patient submitted to an operation and was saved; although it turned out that it was not a tubal pregnancy, but a tubo-ovarian cystic tumor with a pregnancy of the uterus of probably two weeks duration, undergoing expulsion. The symptoms were due to miscarriage induced by the extrauterine tumor.

It has been my custom for years to operate whenever a tumor was found present in the pelvis, whether an extrauterine pregnancy or not; but when symptoms of extrauterine pregnancy also exist, I always urge *immediate* operation.

The supreme gift of the physician is skill in diagnosis, but it involves application; then, it is often very easy to make a diagnosis of extrauterine pregnancy. A given patient may be conscious that there is something wrong and she consults her physician. Let me illustrate with a case. Some time ago a lady of twenty-six years, who had been married six years, and never had been pregnant, called one Friday at the office of her family physician and said that she had a little irregularity and felt that something was wrong. She had a slight discharge of blood, with some unusual pain, which was not the way her menses usually appeared. The doctor was busy, and said, "I will see you to-morrow. Do not worry about it." On Saturday she sent for him, but he was still busy, did not make an examination, and lost the golden moment. He did not realize that the slight metrorrhagia was nature's distress sign, written in letters of blood! On Sunday he was again called and found the patient in collapse. On Friday she had congestion of the tube, a threatened rupture; and the slight bleeding was the sign; on Saturday a little more; and on Sunday evening there was complete rupture. And now the doctor, and everybody except the patient, was awake. During all that night, frantic efforts were made to get some one to operate; and when I arrived next morning at the station, the doctor met me with a blanched face, and exclaimed, "My God, I think we are too late!" We drove to the house as if going to a fire. When I entered the room, the patient, pale as death, gave a slight gasp; and when I reached the bedside she was dead. I hope I shall never again be called upon by the Good Man to witness another such scene. Six months later, the poor doctor drove in front of an express train and was dashed into eternity. I have often wondered whether it was done purposely.

We should operate before rupture has occurred, if possible. What shall we do when rupture has taken place and the patient is in *profound* collapse when first seen? As the reader has stated, here is a condition requiring the exercise of the finest quality of judgment, as well as courage. Often it will be better to wait for the patient to rally; operation in profound shock may be the last straw. Here, probably more than anywhere else in surgery, is a place where the calm judgment of the surgeon upon the individual case will give the best result. I believe that more patients will be saved if we wait for a rally. Keep the patient at rest and use stimulation wisely. Morphia, whiskey and strychnia in small repeated doses hypodermically, stand first. Saline solution, with coffee and valerianate of ammonia by enema, next. Hypodermoclysis is of doubtful value in these cases. If the patient is improving,

wait and watch from hour to hour; in the meantime getting ready for operation. If she isn't improving she is probably doomed, and operation would only serve to hasten the end and thus cut off the last chance for rally. I believe I have saved lives from such a course that would have been inevitably lost if I had immediately operated with the patient still in collapse.

Regarding the question as to how to operate, the reader stated that in several cases he had opened by vaginal section. I do not think that good practice in cases of recent rupture. Indeed, I think it is a dangerous technique, unless the condition has become one of degenerating or suppurating hematocele. Then, merely opening the cavity and allowing the contents to escape is probably all that will be necessary. It is often dangerous to do more, as is proven by the statement of the reader that he was compelled in four of the cases operated by vaginal section finally to make abdominal section to control the hemorrhage which he had started by the effort to remove the clots. One of the four was lost. All four, I believe, would have been saved if he had done primary abdominal section. A mortality of twenty-five per cent. makes two hundred and fifty lives lost in one thousand cases, a total that is probably reached every month in this country alone. When we reflect that all might have been saved by a different technique, this seems appalling.

I learned a lesson about vaginal section away back in 1883, which has served me ever since. I have not made a vaginal section for extrauterine pregnancy since that time, and, unless the anatomical conditions change during my lifetime, I never shall. A patient of Dr. James Ogden, of Pascalville, in July, 1883, had a serious illness; and I decided that she was the subject of an extrauterine pregnancy. I advised operation. The late Dr. T. Gaillard Thomas, of blessed memory, had not long before written of the operation by vaginal section with the hot knife, by which he saved the patient. In my youth and inexperience, I did not realize that his case was merely an old hematocele which had resulted from a ruptured ectopic pregnancy several months previously, while mine had not yet even ruptured. I followed his procedure, however, and lost my patient from hemorrhage several days afterwards. I did not then have the surgical sense to see that the only scientific technique for that condition was by the abdominal route. Remember, we were pioneers in pelvic surgery in those days.

I am almost afraid to tell you that I have never lost a case of operated extrauterine pregnancy since, but I have always operated by the suprapubic way after that first awakening.

Dr. Edward J. Hill, Newark.—I have only two points to make in regard to the doctor's paper, one being in the line of a criticism. Our comforts should not be consulted too often. Patients who have had a severe internal hemorrhage are no cases for transportation to a hospital. What is to be done should be done right on the spot, no matter where it is. Very likely some of the doctor's cases would have recovered if that had been done. By the time the patient has been gotten to the hospital she has just lost enough blood to kill her. Another kind of case that does not need an operation is a late tubal abortion. A great many late cases come to us a week or ten days after the extrusion of the product of conception from the fimbriated end into the abdomen. When this has taken place the patient will go on and get well

in about as quick time as when we remove the tube.

Dr. P. A. Harris, Paterson.—I am very glad to have heard this paper of Dr. Baer's, treating more particularly of the tragic stage of ectopic gestation. It is to be presumed that not very many present are experts in the treatment by operation of ectopic gestation. If his remarks are mainly addressed to the general practitioner, I have but one fault to find with them; and that is, I think he might unintentionally mislead some internist. If the general practitioner performs the operation, then he must be competent to judge in each particular case whether the operation is indicated. One who has performed operations in very many cases of tubal pregnancy must have passed through a variety of experience in that relation. Personally, I feel that cases in which delay has occurred—where delay has been consented to by me, or in which it has been occasioned by the patient's inability to arrive at a decision to accept operation—to which almost all the cases reported by Dr. Baer belong—have proved disastrous, or, nearly so. Two or three of my cases of this kind have been lost where they might have been saved. I cannot therefore conscientiously lend myself to delay in operating in the tragic stage of tubal pregnancy. Let me refer to the non-tragic stage of ectopic gestation. Of the 130 or more cases of ectopic gestation upon which I have operated, ninety per cent. had consulted a physician in the non-tragic stage of the disease; only three of this large number first consulted me. Consequently upon the shoulders of the internist, or general practitioner, must rest the great responsibility of an early diagnosis. In the beginning of the non-tragic stage, the patient is not very ill; she may only have rested temporarily from her usual vocation. She does not faint or fall. Her pulse is not particularly rapid, and her pains are not always very severe. There are two items by which the general practitioner can presumptively diagnosticate ectopic gestation. They are atypical menstruation, and pains. The pains generally closely accompany the metrorrhagia, or vice-versa. In several particulars the so-called atypical menstruation differs from the ordinary menstruation of the individual. In the first place, it rarely occurs at the time menstruation is due. It generally occurs four, five, six, seven, eight, ten, twelve or fourteen days after it is due. It is very apt to differ in quantity, color, or quality from the usual menstruation. This metrorrhagia, or atypical menstruation, may continue without interruption for many days or weeks, or it may simply consist of spottings of blood every few days with colicky pains in the abdomen.

An important point to be remembered is that the occurrence of metrorrhagia, with pains differing in character from previous menstruations, should direct attention to the possibility of the existence of ectopic gestation. About twenty per cent. of the cases of tubal pregnancy which I have operated upon were cured by physicians for the cure of the metrorrhagia. Many were believed to have had an intrauterine abortion. No physician should accept the statement that there has been an abortion. He should always ask if any one has seen a foetus and if so who saw it. Thousands of women are presumed to have aborted when they have really exhibited but the metrorrhagia attending ectopic gestation. When a patient menstruates every twenty-eight days and then goes over her time and develops metror-

rhagia with colicky pains in the pelvis, any physician is entitled to the presumption that she has ectopic gestation. If he gains a presumptive diagnosis he can, by elimination, differentiate this and other conditions. When the diagnosis is reasonably certain operation should be resorted to without further delay.

Dr. G. K. Dickinson, Jersey City.—My opinion is always to operate. I do not think that operations have hastened a death in a single case. Two things lead to death in these tragic cases; one is the delay and hemorrhage, and the other is anesthesia. If a person has bled so much that she is practically pulseless, but yet alive, there is hope in the local method of anesthesia. Do not transfer her to a hospital. Do the operation on the spot, using cocaine spinally or local anesthesia; open the abdomen, and put on clips. As for vaginal drainage, I fear it very much. You can remove loose clots, but the organized false membrane at the top is prone to infection, and, drainage being unsatisfactory, this may lead to trouble. If the patient does not die, convalescence may be protracted. As regards stimulation, I do not quite know what you mean, when you use that indefinite term "stimulate." When a person has lost considerable blood internally, cardio-vascular stimulation increases the bleeding.

Dr. Emery Marvel, Atlantic City.—I want to subscribe to what has been said by Dr. Harris. There is probably no other disease so dangerous as an untreated extrauterine pregnancy. If the diagnosis of this disease could be made before rupture and the proper treatment applied, the mortality would be next to nothing. My experience in those cases where rupture has taken place has been much like that of Dr. Harris. The patients had previously consulted a physician for symptoms that suggested trouble to themselves. Some have given me a history of having been curetted just previous to the rupture. Extrauterine pregnancy is one of the conditions that contraindicate uterine curettement. After the diagnosis of rupture has been made, what surgical principles can be applied to a bleeding bloodvessel but to catch the bleeding point and stop the hemorrhage? I think it justifiable to raise a voice in opposition to any delay. Delay is disastrous and embarrasses in every way the end results. Certainly the time for operation is immediately after the diagnosis is made.

As for stimulation, I am also at a loss to know what is meant. If the condition is that of shock, it can be benefited by stimulating the vasomotors, which can be done during the time of the operation by adding salt solution, or adrenal-salt solution to the blood circulation. It would seem to be unjustifiable to delay on that ground, therefore. As to the means of operation, the first case recorded by the essayist illustrates the fact that one can reach the tube more easily by the upper route than by way of the vagina. One has his objective point in hand, and is sure of controlling the hemorrhage.

Dr. J. M. Rector, Jersey City.—It seems to me that in these tragic cases we should bring to our assistance an aid that none of us have spoken about. The blood-pressure shows the vascular condition of the patient and how much shock she is suffering from. The rising and falling of the tube will show the exact cardiac condition, how much stimulation to use, how much blood has been lost, and how much vitality remains in the patient. You will find by the use of this method that the tragic cases will give much less mor-

talidity. The register of the column of mercury will show how much stimulation to give. This indiscriminate stimulation—pouring saline into the veins without knowing what reaction you will get—is, it seems to me, almost brutal surgery. So long as we go on throwing in this indiscriminate stimulation in these tragic cases, we shall lose more than we save, because of ignorance as to the exact vascular and cardiac condition.

Dr. J. W. Martindale, Camden.—I was much impressed with the remarks of the essayist this evening. As a general rule, we are in the habit of telling about the cases we save, and not about those we lose. There are two cases that come to my mind at the present time of the tragic stage of ectopic gestation. A short time ago I saw a woman in collapse. She was pulseless and had every appearance of approaching death. She was operated on and got well. The other case, just exactly similar, I saw a few days afterwards. I did not think that this patient was any worse than the other one; but she was operated on and died. Who is to say which is the case to recover and which the one not to get well? I think it is the part of courage, and the proper part to take, to operate on all these cases. In a great many cases the patients are in collapse when we see them. They have fainted, and syncope is nature's remedy to stop bleeding. As soon as a person faints, bleeding stops; and if we stimulate, we make the heart act that much more strongly and the bleeding re-commences. It seems to me that in these circumstances stimulation would be productive of more harm than good, and I believe that in the tragic stage of ectopic gestation the proper thing is to give the patient the chance by operating.

Dr. Baer, closing.—I think I made it very plain in my paper that stimulation should not be used in all cases, except that a hypodermic of one-quarter grain of morphine should be used in every case; because it quiets the patient, relieves shock and has a stimulating effect on the heart. As a rule I do not resort to bold stimulation until ready to begin operating and the bleeding is controlled. Intravenous infusion of salt solution is always used in desperate cases, and in one case at least saved a life.

I did not mean to say that I had not saved desperate cases, nor that a man should not operate when he thinks there is the slightest chance of saving the patient. The man who refused to do so would be a coward and not worthy the name of surgeon. There are, however, some cases in which waiting will save the patient. I do not know how to distinguish these cases. I have not learned to do so, but they exist. If the femoral artery, for instance, is bleeding, a man would be a poor surgeon to stand by and wait until reaction had occurred before ligating. But we are not dealing with an open vessel but with cases in which the patient has had previous shock and the bleeding has stopped from fainting and clotting, which is nature's method of stopping hemorrhage. There is only one case among those reported in which I am sorry that I operated; and that was a case of error in judgment, because it was not a proper case for that method of treatment. I think I treated ten cases from below and saved every one. Every patient was out of bed sooner than were those treated from above. They had their ovaries, too, although they were not of much use to them. If I could save all of my patients by operating in one way I should use that way, but here is the point of individual judgment.

I cannot agree with the speaker who suggests

operating at once on the bed. In proper surroundings it may save life, but it has been my misfortune to see these cases in filthy homes where more cases would be lost from sepsis than would be saved by immediate work. As to the question of the hematocele's being absorbed, that is true in a very limited number of cases; while if the hematocele is there, it is always subject to infection and causes death from sepsis. In the large majority of cases, if it is not opened and drainage established, this will be the result. Foreign bodies are always dangerous, and tumors of any kind are such and should be removed without delay. I have myself seen cases in which patients have recovered with a pelvic hematocele, but I know of more cases that were not operated on in which the patients died.

I am very thankful to the members for their kindly consideration of my paper.

DIET IN PULMONARY TUBERCULOSIS.*

By Theodore Senseman, M. D.,
Atlantic City.

In taking up this question of diet in tuberculosis there are one or two factors presented which we must thoroughly recognize and appreciate if we are to intelligently treat with this phase of the subject. In all our patients there are evidences of a steady and, at times, marked loss of weight which point directly to a disturbed condition of metabolism—the digestive organs are unable to handle the food ingested and assimilation is therefore interfered with. The question here presented is whether this disturbance is a part of the tubercular process and caused by it, or whether it arises incidentally from some source entirely foreign to the disease. I firmly believe that the latter is the cause and that this disturbance presents the opportunity for the disease to manifest itself through the action of its toxins on the organism, for so long as the metabolic equilibrium is maintained the disease does not make itself felt to any great extent, which shows that the process is extending very little, if at all. If this metabolic equilibrium be steadily maintained the diseased process will in time be eradicated and the patient experience a spontaneous cure, without, perhaps, ever being conscious of the presence of the disease. It is only when the resistance of the organism is reduced through insufficient nourishment, consequent upon a defective digestion and a reduced assimilation, that the disease process is enabled to increase and produce the symp-

toms which we recognize as the disease tuberculosis.

When this digestive disturbance occurs we find that nature takes cognizance of it and in order to protect these organs and permit them to recover their equilibrium, endeavors to forestall the unwelcome guest—food—by bringing about the condition which we call loss of appetite or distaste for food—for good appetite comes from good digestion and not good digestion from good appetite. Hence, with the desire for food gone, less is taken and consequently less embarrassment of the digestive organs follows. With these facts in mind, if we will recognize them as facts, it seems to me that much of the efforts in the direction of dieting the tubercular individual is simply putting the "cart before the horse." It is self evident that if good appetite waits upon good digestion, it is going at things backwards when we endeavor to sharpen up a poor appetite with whisky, tonics, etc., with the intention of filling our patient with a lot of food stuffs from which he gains no nourishment, but from which he derives more or less digestive embarrassment. Rather is it the part of wisdom to bolster up and improve the digestion, allowing the appetite to follow of itself the improved assimilation as it most surely will. Right here we sound the keynote of the treatment of tuberculosis, for all the agents which are included in the rational regime are those which do this very thing. They aim to bring about a condition of constructive metabolism or anabolism—they aim to raise, what may be called, the pivotal point of the patient's digestive ability—they aim to so strengthen the organism that it will be able to assimilate a greater amount of nourishment, which in return will enable it to offer a greater resistance to the diseased process.

The practice of stuffing the patient with large amounts of solid foods, fats, oils, etc., does just what we should avoid doing; it throws an extra strain upon the digestive organs and of itself prevents assimilation. I do not believe that two out of any ten men in perfect health could consume the daily rations which some methods of treatment demand of the phthical and keep it up for any length of time and maintain a condition of health. It is not the amount of food ingested nor yet so much the quality of that food but the amount which can be assimilated that is of prime importance in this connection. We know that certain articles of food, as, for instance, cheese, contain a high percentage of nutriment, but we

*Read at the 141st Annual Meeting of the Medical Society of New Jersey, Long Branch, June 26, 1907.

also know that the organism demands that they be eaten sparingly; the nutriment is there but the digestive organs are unable to extract and assimilate it in any but small amounts. As an illustration of the point I am trying to make, let us take as an analogous example—a steam engine. The coal here is the food supply, and it is known that to maintain a train at a given rate of speed—say forty miles an hour—there must be consumed a given quantity of coal. Now at a first glance it might appear that if we double the amount of coal consumed we must of necessity double the speed of the train, but this we know is not the case. For a time such increase in the coal consumption may produce a small and disproportionate increase in the speed, but we can proceed to shovel on coal until even the forty-mile rate cannot be maintained, and finally we can so smother the fire that the engine will not go at all. In other words, there is, what I have already referred to, a pivotal point up to which we continue to gain, beyond which we lose. In the human organism, however, this pivotal point is not stationary as in the engine, but is capable of being raised, and as we strengthen the digestive organs, we, at the same time, raise the pivotal point of their ability to extract and assimilate nourishment.

It would therefore seem that the diet which was the most easily assimilated—which gave the greatest amount of nourishment while at the same time made the least demand upon the digestive organs—would be the diet of choice. I have always believed, and have, as yet, never seen any good reason for disbelieving that in a diet composed largely or entirely of raw eggs and milk we have this. It is true that the amount of fat contained in these articles of food may not be so great as in the ordinary diet of solid food to which is added cod liver oil, for instance, or some of the fatty emulsions which are on the market, but the fat is certainly more easily digested and assimilated and the lessened demand upon the digestive organs is a conservation of energy and hence a greater gain for the storage cells and tissues of the organisms. It has been my experience that the large majority of our tubercular patients can not handle these excessive amounts of fat for any length of time, and, while it is true that we do see and hear of those who can take large quantities with apparently no discomfort following, yet I believe where one will, nine will not. If the digestive organs of our patient are able to handle but a given quan-

tity of fat—and we must admit a limit—then let us find that limit and give the fat in the most easily digestible form. With the raw egg and milk diet it is very easy to ascertain this limit and, by increasing or decreasing the amount taken, can so regulate the amount of fat ingested. Moreover, we are at the same time feeding our patients all the elements which the organism demands—we are giving him a perfect food. By an intelligent administration of these articles of food the digestive organs can be trained—the pivotal point can be raised until in some cases surprisingly large quantities can be taken and, what is of far greater importance, can be assimilated.

I do not wish to imply that I consider this diet absolutely essential for recovery, for we see some few who cannot and many more who will not submit to this diet, who nevertheless do make recoveries, but these recoveries are slower in accomplishment, and are attended with greater and more frequent setbacks and discomforts. For the advanced cases, however, where the patient is receiving through non-assimilation no nourishment at all, or very little, it is the only diet and is often attended with very flattering results. To succeed with this diet the patient must be intelligently advised and the amount taken should be decided by the physician, as well as the time and the manner of taking. Simply advising the patient to drink milk and eat raw eggs will not do, for most patients, left to their own direction, will either not take sufficient or will so plan their daily diet that little gain can be expected. It has been my custom to first gain the patient's confidence and explain just why I advise this diet, what is to be expected from the proper compliance with the advice given, and until they agree to give it a fair trial do not attempt to start. Unless the patient is willing to coöperate little can be done. Having gained their consent start the diet by advising them to make their breakfast of eggs and milk entirely, starting with two or three raw eggs, well beaten and drunk from a glass, and a pint of milk. It is of first importance that only the best milk procurable should be used—a milk not too rich, five per cent. of cream being sufficient—and only the freshest of eggs—I know of no more nauseating dose than a stale raw egg. Eggs from hens fed entirely upon grain are much preferable to those from hens fed upon garbage, as the former when fresh are practically tasteless. I think it is a mistake to attempt to disguise the egg taste with

whiskey, extracts, etc., and if the proper eggs are well beaten and drunk from a glass while they are moderately cold, there is, as I have said, practically no taste to disguise. The patients are instructed to drink a glass of milk either hot or cold, upon rising just before or during the bath. While they are dressing the remainder is taken and this is to be taken slowly—sometimes it is necessary to consume an hour or two in finishing this breakfast. At lunch time if an exclusive egg and milk diet has been decided upon, the same amount is given, and again at evening. Before retiring the patient slowly sips a pint of milk. If one meal of solid food is to be allowed the best time for this meal is in the middle of the day and instructions should be given by the physician regarding what should and what should not be eaten. While it is not necessary to be too rigid, still, it seems to me that there are certain articles which can very profitably be interdicted. Tea—the tipple of women—is one of the first of these. There are two kinds of tipplers, alcoholic and those who prefer coffee or tea, and both, I believe, do harm. Rich and indigestible foods, pastries, etc., should also be rigidly excluded. The number of eggs and the amount of milk are slowly increased until the limit is reached. I aim to produce an average gain in weight of from one and one-half to two and one-half pounds a week, and the least quantity of food which will produce a steady increase of this amount is sufficient. Some patients will gain more than this, and in others there may be no gain at all for several weeks after starting the diet, but if properly managed, the disease being not too far advanced, most patients will average this.

Again let me reiterate and emphasize the importance of recognizing the fact that there is a pivotal point in each patient's digestive ability and that this point must be ascertained if success is to follow. I recall two cases which illustrate this point: In one case, on a diet of nine raw eggs and three quarts and one pint of milk per day a gain of twenty-eight pounds in ten weeks, or an average of two and four-fifths pounds per week. In this case I made repeated attempts to increase the diet, feeling dissatisfied with the small amount taken, but each time there was a digestive upset and the patient lost. In the other case it required eighteen raw eggs and five quarts of milk a day to average a two-pound gain a week. In both cases the diet caused no digestive disturbance in the quantities mentioned, but

any attempt to increase the amount resulted in a loss instead of a gain. Whenever the patient has difficulty in taking the diet, I instruct him to drop a meal or two, substituting solid food, or better, leave out the eggs, taking the same quantity of milk. This usually sets them up again and they are able to continue as before. During the period of this diet I have the patient take some saline, as, for instance, Abalina Water, and insist that they shall have a bowel clearing every day—not simply a movement, but a complete emptying of the bowels, not to the extent of a severe purging, however. Patients should be weighed on the same scales, with as nearly the same weight of clothes as is possible, once or twice a week and a record kept.

When the patient attains what should be his normal weight, and when the symptoms show that the disease process is declining, the amount of diet may be gradually lessened. If he has been on the egg and milk diet exclusively, have him eat one meal of solid food in the middle of the day; if he has been eating one meal, have him add to this the breakfast of solid food, always substituting milk for tea or coffee. If he can hold his weight at or about the normal this plan is continued; if he loses, he is put back on eggs and milk as before. Through this gradual weaning from the milk and eggs the patient becomes able to assimilate a sufficient amount of nourishment ingested in the form of solid food, and in time the eggs and milk, as a diet, are discarded. This may take some time, usually from one to three years, but the time required is not the test, but the condition of the patient. It is possible to get too much of a good thing, and it is unreasonable to endeavor to force a person to weigh 200 who is built to tip the scales at 140. Up to the normal weight the patient is improving so long as there is a steady gain of weight, and he is going backward if he fails to gain or if he loses. The normal weight being attained, all that is necessary is that the patient shall maintain it and the least amount of food which will accomplish this is sufficient. So long as he can keep his weight at or about the normal, his safety is assured so far as the disease tuberculosis is concerned.

In this connection I wish to briefly consider the propriety of giving alcoholic stimulants, more especially whiskey, to our tubercular patients. There are times, during the course of the disease when whiskey is of decided benefit, but, I believe, too much has been given in the past and is still being

given. For the relief of the attacks of weakness or partial collapse which at times occur, whiskey does good if properly given, but to administer it in a routine manner or to sharpen the appetite is, I believe, a mistake, for reasons which I have endeavored to make plain in the first part of this paper. I cannot enter into the question whether or not alcohol is a food, but I am certain that if it is not a food we do not want it, and if it is to be considered a food, it certainly is not the kind of food which our patients require in this disease. In closing, I would emphasize the following points, *viz.*:

1. That it is not the amount of food ingested, but the amount assimilated, that is of importance.
2. That our efforts should be directed towards improving the digestion and allowing the appetite to follow of its own accord.
3. That there is a pivotal point in each patient's digestive ability which should be ascertained.
4. That it is important to realize that each patient has a normal weight beyond which we should not endeavor to force him.
5. That once this normal weight is reached, that diet which will enable him to maintain it is sufficient.
6. That so long as the patient can maintain this normal weight he has nothing to fear from the disease tuberculosis.

DISCUSSION.

Dr. D. E. English, Milburn.—I am sorry the doctor did not emphasize purgation more. If we shovel an extra amount of coal into the engine, we must not forget to take out an increased quantity of ashes. I favor three or four movements a day. I like to add a little water and salt to each glass of milk.

Dr. Theo. W. Corwin, Newark.—I think the merits of all this thing consist in the study of the nutrition of the individual patient. It does not do to prescribe anything in a routine manner, not even feeding. It depends upon the careful watching of the patient from day to day. This will include the care of every habit the patient lives by—breathing, sleeping, and everything else. It is the careful study of the patient in line with experience and good judgment that is needed. I think the doctor is to be congratulated upon his most interesting paper.

PREMATURE SEPARATION OF THE PLACENTA.*

By. J. Watson Martindale, M. D.,
Camden, N. J.

On the morning of July 8th, 1906, I received notice to make a call in my neighborhood. The child who brought the message left it on the table, and I merely noticed the request to call at a certain street and number. I did not know the name of the patient, and as I had several persons waiting in my office I did not at once respond to the call. In the course of half an hour, another messenger came to tell me that there was a very sick woman at the above address. I immediately answered the second call.

When I arrived on the scene I saw a woman lying on a sofa with two women-neighbors rubbing her hands and giving her inhalations of ammonia. She was very pale and almost pulseless. The woman who lived in the adjoining house said the patient was placing a large picture on the wall when she felt giddy and almost fell from the chair on which she was standing; she got down on the sofa and had just sufficient strength to knock on the partition wall before she became unconscious.

In a short time she recovered consciousness so that she could tell me that she was seven months pregnant and that she thought she was flooding. On examination a small quantity of serous fluid was seen on her underclothes, the cervix was dilated as large as a dollar and was quite soft. Before making vaginal examination my first impression was that the woman was suffering from placenta previa. There was no evidence of the placenta coming first, and through the membranes the head could be felt engaging at the brim of the pelvis. There was and had been no labor pain. The abdomen was much enlarged—the uterus reaching to the ensiform cartilage and having a doughy feel.

After the examination, the woman again became unconscious. I had never seen anything of the kind before, and could hardly reason out the condition, but felt suspicious that there was a separation of the placenta, and that the blood was working its way between the uterus and the bag of waters. I decided that the proper thing to do under the circumstances was to empty the uterus. I called on my neighbor, Dr. H. H. Sherck, and we proceeded to etherize the patient.

* Read at the 141st annual meeting of the Medical Society of New Jersey, June, 1907.

The examination for tubercle bacilli in the urine by the ordinary method of staining, is not decisive by any means, even if the bladder has been catheterized and differential stains for smegma bacilli have been employed. Numerous examinations with the aid of these procedures must be made, and even then the diagnosis is only a presumptive one. The only sure test is by injecting a large quantity of the sediment into a guinea-pig.—*Amer. Jour. of Surgery.*

Under anesthesia, the os was easily dilated to a sufficient extent to admit the forceps, and a dead child was delivered without difficulty. As the child passed the introitus, the placenta was swept out with a tremendous gush of blood, showing that there had been a complete separation of that structure. During the time occupied in these manipulations there had been periods when the pulse came up under stimulation only to flag again. She was unconscious from time to time. A small quantity of the anesthetic had been used, and she soon came out from under it. The uterus contracted well and she did not lose much blood after delivery. Her pulse was very weak and the respirations rapid. Salt solution, injections of strychnine, whisky, camphorated oil, digitalis and external heat all failed to rally her, and she died one hour and fifteen minutes after my arrival on the scene. Just as she breathed her last her husband came in; he had bade her good-bye as he left to go to work in the morning. She was then apparently in good health, and I shall never forget the grief of the poor man as he came in and found her dead. On examination of the placenta, there was found a large area of calcareous degeneration, and I suppose this had been the cause of the placenta separation.

Dr. Henry Coe, of New York, thus describes his case in the transactions of the American Gynecological Society, 1891: "A healthy primipara, of wealthy family, at full term, came down in labor; she had a vertex presentation, left occipito-anterior, fetal heart sound, strong; at three o'clock in the morning the os was half dilated, head engaged, fetal heart sounds O. K. The pains were short and irregular, patient had constant pain in the lower abdomen. At six o'clock a show was observed. She had been walking around and did not feel bad. Palpation showed the uterus tumor had increased in size and had a doughy feel. The fetal parts were obscured and the heart sounds absent. On using the commode, there was a profuse discharge from the vagina. The pulse began to go down. Stimulants were ordered. The membranes were ruptured, strong pains came and forceps were used and a dead child delivered. It was followed by the placenta and a quart of coagulated blood. The uterus was atonic and refused to contract. The amount of blood lost was not excessive, but the patient died an hour afterwards apparently from shock. The placenta showed signs of fatty degeneration. The funis was of normal

length and was not twisted around the neck of the child."

Dr. Nicholson, obstetrician to the University Hospital, quotes the following in the *University Pennsylvania Medical Bulletin*, September, 1906:—

"Mrs. C., age thirty-six years, mother of six children. All previous labors have been easy. At the present time she is seven months pregnant. The first symptom of trouble was a hemorrhage which occurred several hours before I saw her. Upon examination, there was found a slight flow of blood from the vagina; the membranes were ruptured. It was at first thought she was suffering from placenta previa. After more careful examination, a diagnosis of premature separation of the placenta was made. As the cervix was rigid, manual dilatation was attempted and bags were also used. At this time the blood loss was slight and her general condition was not alarming. Within an hour, her pulse showed signs of failure, its rate having reached 150; ether was administered, and as the head had not engaged, podalic version was performed. The condition of the mother improved after delivery, and normal salt solution was used with other free stimulation, but shortly after the removal of the placenta she suddenly died. The uterus had contracted perfectly and at once."

In the *American Journal of Obstetrics* (1870), Dr. Goodell wrote a paper on the subject of premature detachment of the placenta. He says:—

"Early in the last century the death of Princess Charlotte gave a great impulse to the study of internal hemorrhage. In 1818 the French Academy offered a prize for the best essay on the subject. Among several competitors C. Boudelocque was named. M. Bonea received a gold medal and Madame Boivin a silver medal. She and Madame Lachapelle denied the possibility of the premature separation of the placenta. These two last lady obstetricians laid claim to the personal observation of forty-two thousand labors, and say that they never had met with such a condition. Velpeau, a still more modern authority, denies the possibility of such an accident; he expresses his opinion as follows: 'How indeed can we conceive that the blood, which escapes from the uterine vessels in somewhat considerable quantities, is capable of dilating beyond measure and almost instantaneously the cavity of the womb, instead of running between the gestative organ and its contents so as to escape outwards, or of rupturing

the membranes and becoming effused within their cavity. How can we admit that the adherences of the placenta, which is habitually so weak, could resist the effort of the blood, tending to form a new cavity for its own reception more powerful than the uterus, which yields with so much difficulty?" Dr. Goodell reported ninety-three cases in the literature up to his time and his masterly paper on the subject has thrown much light upon it.

The causes of this condition have been attributed by different authorities to the hemorrhagic diathesis, nephritis, hydramnios, death of the fetus, short funis, fatty and calcareous degeneration of the placenta.

Symptoms. Steady pain in the lower part of the abdomen, weak fetal heart sounds, irregularity of the uterine contractions together with a show of blood. Sometimes external hemorrhage is not seen; it is reported in one-fourth of all the cases. The hemorrhage is generally concealed until it reaches serious proportions. Goodell says: "This trustworthy symptom does not usually occur at the outset of the attack, but at a time when it may be too late to interfere. A diagnosis should not therefore be made on its presence, but simply be approved by it." The patient's pulse and general appearance indicates that something serious is going on, labor is arrested, os partly dilated, membranes tense; the patient rapidly grows worse, syncope supervenes and she dies unless relieved. Or the membranes have been ruptured, bearing-down pain occurs, and she is delivered spontaneously.

Diagnosis. From colic, by the absence of shock, and the history of eating some undigestible food, the presence of constipation. From ruptured tubal abscess, by the previous history of tubal disease; localized tenderness over the tubes. From rupture of the uterus: In this case the condition is sudden, while in detached placenta it is more gradual. In the case of a ruptured uterus the uterine tumor gets smaller after the accident, while in detached placenta it gets larger.

Prognosis. It is very bad. Children mostly perish; only vigorous women with prompt action on the part of the accoucher are likely to survive. Cases which have no labor pains generally perish; some die of shock, some from loss of blood. If pains are fairly strong, the uterus not over distended, cervix dilatable and well engaged, we ought to save the patient. If she is in collapse, the uterus distended and inactive, os rigid, the outlook is highly unfavorable.

After delivery she is likely to die of post partum hemorrhage. Under the circumstances, it is the part of prudence to call in a consultant.

Treatment. The question resolves itself into this, Shall we wait, or shall we empty the uterus at once? Some writers recommend the use of ergot, the making of firm pressure over the fundus. In one of Dr. Coe's cases this was done and resulted in the rupture of the uterus. Dr. Brunton says to preserve the membranes and wait for dilatation to take place, which he claims has always been successful in his cases. Robert Lee, in *Clinical Midwifery*, page 368, says: "Rupture the membranes, give ergot and stimulants and use a frame binder of the uterus. The result of this treatment in six cases was four deaths and two recoveries." Dr. Fry says, if the os is dilated, use forceps or craniotomy; if not, the best method is Porro's amputation; he describes a case with an undilatable cervix which he treated successfully in this manner.

Dr. Murray recommends elevation and bandaging the extremities, stimulants and the use of tampon. Dr. Coe says, if the head is down apply the forceps; if not use manual dilatation of cervix and do a craniotomy or version. For post partum hemorrhage, place the hand in the vagina, turn out the clots, push iodoform gauze up to the fundus, placing one hand on the outside over the fundus, and the other on the inside, use external heat, salt solution and free stimulation. Dr. Goodell recommends the prompt interference of the obstetrician; he suggests the application of the forceps, craniotomy or version, if the os is dilatable, if not, do a Caesarian section. He quotes ninety-three cases; forty-three of these were treated on the expectant plan with thirty-two deaths, a mortality of seventy per cent.; fifty were treated by emptying the uterus in the most expeditious manner possible with fifteen deaths, a mortality of thirty per cent.

In conclusion, I wish to state that I hope none of my hearers may have the misfortune to have a fatal case of this character, and the object of this paper is to bring before them a condition which is very grave, and one which requires for its management a stout heart and prompt action on the part of the attendant.

DISCUSSION.

Dr. H. H. Sherk, Camden.—I won't occupy more than a few minutes. I cannot conceive of anything more appalling than to be called to a case of this kind, where death almost stares you in the face. In one of my usual rounds, one

morning, a messenger came running after me and said that Dr. Martindale wanted me to assist him in a bad case; so, without any delay, I went to the house as quickly as possible. The case was then in the condition that the doctor has so ably described in his paper. I need not go into the details. The question arises, What are you going to do about it? There was a patient pulseless; though we could not see any possible signs of hemorrhage except a little serous fluid on the floor. Yet there the patient was in collapse, blanched and almost exsanguinated.

After a hurried consultation, we thought that the best thing to do in the case was to deliver the woman as quickly as possible; and, under anesthesia and forced dilatation, the uterus was emptied. Just as soon as the child was born the placenta shot out of the vulva as if hurled by some unseen force. I have seen many cases of hemorrhage following delivery, but had never seen any patient succumb. They all seemed to get better, although they were pretty bad at times. I fully expected this case to follow the general rule, but as soon as the placenta was delivered spontaneously the woman went into collapse. It did not make any difference what we did. Nothing had any effect. We introduced salt solution and the other remedies the doctor has mentioned, but in a short time the woman died. I think it is a grand privilege for a doctor to be able to do like Enoch Arden ("and he had plucked a life from the dread sweep of the down-streaming seas") or saved somebody from death; but in this case we were left. There was nothing possible to do.

I have not seen much of the literature concerning this class of cases. This was the first of them that it has been my privilege to see, and I hope it will be the last one; but I have read the paper of Dr. Franks, of Louisville, who cites some cases of the sort. One was that of a woman who had previously given birth to two children at term. At the time of this labor, she gave birth to a dead child. There was no pulsation in the cord. The placenta came away immediately after the birth. The condition was due to fatty degeneration. The second case was in a woman of twenty-two years, whose husband had a history of syphilis. Two children had been born previously without signs of specific disease. This labor was precipitated and twins were born. One placenta was immediately expelled. Both children were dead. In this case the placenta revealed calcareous deposits. The uterus was contracted, and the doctor left the patient apparently in good condition. About an hour afterward he was called and found a profuse postpartum hemorrhage. One side of the uterus was contracted, and the other side was dilated. After the introduction of ice and massage, the uterus contracted and these two patients recovered.

Dr. Chas. P. Noble.—I was particularly interested in Dr. Martindale's paper. I am no longer active as an obstetrician; but I began my medical career as such, and served five years in a maternity hospital. I am most glad that I had that experience. Those five years of training have been of the greatest value to me, in improving my knowledge of woman in relation to the primary purpose for which she exists, and in improving my powers of diagnosis through physical means.

Every one that ever attends labor cases should post himself about this question, so well presented by Dr. Martindale, because, although these cases are rare, when they do occur the only salvation

for the patient is that the physician shall act promptly and correctly. Otherwise she will inevitably die. The classical paper of Goodell contains everything known about the subject up to the time he wrote. It is a remarkable thing that his reputation was made by writing that paper and by writing a review of Dr. Byford's work on gynecology. This shows how things have changed in forty years. No man could gain an international reputation in such a manner to-day. It is true, however, that he became a national figure through having written that paper and this review. The only thing that we have learned since that paper was read is asepsis; and improvement in surgery since that day has been largely due to this. We can add to Dr. Goodell's therapeutic indications somewhat. To-day, the consensus of opinion among the men best entitled to an opinion about the subject is that if, at the time the diagnosis of concealed hemorrhage is made, the cervix is sufficiently dilated for the application of forceps, that treatment should be instituted; if it is not, the patient should at once have a Cæsarean section performed, provided there is any one available that can do it. I think that almost anything is safer than to have a man perform the Cæsarean operation who does not know anything about it. If the physician does not know how to do it and cannot get any one that does, it is better to manage the case in some other way. If the os is not dilated, Cæsarean section should immediately be carried out.

DISCUSSION OF DR. GODFREY'S PAPER.

(Continued from page 74.)

Dr. John W. Bennett, Long Branch.—In reply to the gentleman that just arose, I would state that thirty per cent. of the colleges of the United States to-day are those whose graduates the Board of Examiners of New Jersey will not recognize or permit to take the examination. Dr. Godfrey has left the room and has asked me to reply for him. I think I am familiar with the subject, being the Secretary of the Board of Examiners and having been a member for the past seven years.

We have endeavored, to the best of our ability, to administer affairs so that they will protect the medical profession of the State. We are not a prosecuting board, however; the law does not confer that power upon us. It distinctly states that the secretary of the board shall call to the attention of the district attorney any violations of the law, and I do not think that any practitioner in the State of New Jersey can say that he has ever called the attention of the board to any illegal practitioners but what they have taken up the matter with the prosecutor of the county and endeavored to have him act in the matter. It is utterly impossible for the members of the board to take cognizance of the fact of illegal practitioners without its having been brought to their attention. That is a matter that the county society should take hold of. The county societies do not do so. It is a fact, as you are well aware, that most of our county societies meet once or twice a year and talk a short while, and that ends the meeting. If they were more alive to the needs of the profession, more good would be accomplished. You can readily see how impossible it would be for the Board of Examiners to prosecute. They devote their time in trying to upbuild the profession in the State. This year they have received \$200 in salary. That is what we received. We are not getting rich on it. The Secretary has not

received enough to pay his stenographer. You can see how rich he is getting. I can state, however, that there has never been a communication received that remained unanswered over twenty-four hours.

There is no question but what the Board of Medical Examiners has tended to upbuild the medical colleges to a great extent. You can all remember twenty years ago, when all our medical colleges gave a two years' course and turned out their students; gave the same course each year, and graduated at the end of the second. Now none gives a course of less than four years and they have improved their courses in every respect. You ought to give some of the credit to the examining board. The colleges did it to get their graduates able to pass the various state examining boards. I consider that New Jersey has cause to congratulate herself on the medical law we have. It may not be perfect; we do not often attain the ideal in this world; but I believe that New Jersey has the best medical law of any State in the Union, and it is so recognized by her sister States. The New Jersey license is endorsed by more States than is that of any other State in the Union.

One of the gentlemen spoke about a man from New York who had had his license endorsed for a fee of \$50. He must have first passed an examination by the State board of New York, which has laws similar to our own, or by that of some other State whose law is equal to our own and carried out in the same way. The intent of the law is that if a man passes an examination in which the requirements are equal to the requirements of New Jersey, the passing of that examination shall be sufficient. The reason the additional fee is charged is that if a man goes to Trenton he will have his traveling expenses, his hotel bills and his fees to pay. This costs more than the extra \$25. If it were not for these additional fees, the board would have to pay the postage and printing bills. Dr. Baldwin knows that all this comes out of the receipts of the board. As I stated before, though the law of New Jersey may not be absolutely perfect, it is the best for regulating the practice of medicine in the United States of America.

The law is for the protection of the citizens of the State. The attention of the prosecutor should be called to all cases of illegal practitioners. If they should call the district attorney's attention to this matter, the law makes it his duty to prosecute such violation. My experience has been that there has never been an instance in which any member of the board has called the attention of the district attorney to such a violation that he did not give a hearing and promise to take the matter in charge. If it has not always been brought to a successful termination, it is because the person making the complaint has weakened. If John Jones knows that John Smith is practicing illegally and will testify to this fact, John Smith will be prosecuted. It seems to me to be one of the functions of the county medical societies to stand by the prosecutor and furnish him with evidence. In two cases in Monmouth county I made the complaint, and in both cases the person was convicted.

W. J. Mayo in a recent number of the *Canada Lancet*, states that four out of five of all tumors of the breast at any age are malignant and that one-half of the balance will become malignant.

ANNUAL DINNER OF THE MEDICAL SOCIETY OF NEW JERSEY.

Pleasure Bay, June 26, 1907.

The Annual Dinner was one of the most enjoyable features of our last meeting. The secretary, acting upon the suggestion of several of our members, has induced the speakers to permit a report of their remarks to be published. This will enable those who were absent to know something of what was said and done, and will revive pleasant memories in the minds of the many members and guests who were present on that occasion.

WILLIAM J. CHANDLER, Secretary.

After a most bountiful dinner, styled a "clam-bake," and served in the approved form of the most highly favored seaside resorts, the President, Dr. Marcy, as toastmaster, opened the post-prandial exercises as follows:

Dr. Marcy: Ladies and Gentlemen.—We are highly favored in having with us a number of distinguished persons, who are here as guests of our Society. They have come to join with us in making this meeting a memorable one, and we most heartily welcome them on this occasion. I had hoped for the presence here to-night of two of New Jersey's most honored citizens, Gov. E. C. Stokes and ex-President Grover Cleveland, but I can only present their letters of regret:

June 22, 1907.

My Dear Dr. Marcy:—

I had hoped to be able to be with you next Wednesday at Long Branch and extend my greetings in person to the members of your Society. It would have been a great pleasure to me to have faced the members of a profession so important to the health, well-being and welfare of our Commonwealth. The medical profession has grown in scope as the varied requirements of our civilization have imposed new duties upon them. It is not alone the care of the sick, but the prevention of sickness, problems of morality and other civic duties that are now within your proper care and attention.

I congratulate you upon the high standing which has been reached by your profession in New Jersey and assure you that our State is proud of your membership.

The legislative situation is such at the present time that I am compelled to remain in Trenton and forgo the pleasure of your hospitality.

With best wishes, I am,

Very sincerely yours,

E. C. STOKES.

Dr. Alexander Marcy, Jr.,
Riverton, N. J.

Princeton, N. J., April 5th, 1907.

Dr. Alexander Marcy, Jr.,
President Medical Society of New Jersey,
Riverton, N. J.

Dear Sir:—

I have received your very courteous invitation to be present at the next annual meeting of the Medical Society of New Jersey, to be held at Cape May during the last days of June next. It would give me great pleasure and satisfaction to be present on this occasion, especially in view of the peculiar circumstances to which you refer. I therefore very much regret that engagements already made and an unusual volume of work

which cannot be postponed prevent my acceptance of your invitation.

Yours very truly,
GROVER CLEVELAND.

Dr. Marcy: Ladies and gentlemen, I am sure you all join in the regret that we are not to have the Governor respond in person to the first toast of the evening, but inasmuch as he is having troubles of his own at Trenton, we will forgive him for not coming to Pleasure Bay. We have with us, however, a worthy representative, in the person of the Lieutenant Governor, Dr. Walter B. Johnson, of Paterson, who will respond to "The State of New Jersey." It gives me great pleasure to present Dr. Johnson.

Dr. Johnson: Mr. Toastmaster, Ladies and Gentlemen.—It affords me great pleasure to be called upon in what appears to be a semi-political manner, and to have been introduced as the Lieutenant Governor of the State of New Jersey, to respond for New Jersey.

This is the first time that I have been called upon in the State of New Jersey to respond to this toast. Of course, in attending functions of this character in other states, I am generally selected for this purpose. On such occasions, it is my pleasure to refer to the greatness of this state in all branches of the Arts and Sciences, but it is hardly necessary before this audience to extol the virtues of the state. On such occasions I invariably ask the question, "Have you ever heard of the City of Paterson," and hearing certain diners in my immediate vicinity remark sotto-voce, "Anarchist," I am given the opportunity to state that although born and brought up in the city of Paterson, I have never yet even seen an anarchist, and that I am sure that all anarchists who may be found in the State of New Jersey are imported from New York, Pennsylvania or some foreign State. In making desultory remarks of this character before such an assemblage, one feels more or less trepidation.

Having been notified about five minutes ago, that I was to respond for the Governor, I immediately concluded that I must tell some stories of a more or less jocular character. As the only possible means of making my remarks satisfactory, I immediately interviewed Dr. Evans and Dr. Baldwin asking them to help me out and tell me a story that I might repeat to you, but they replied in all seriousness that they did not know any, probably in the hope that they might get a chance to tell the story themselves, they were determined that I should not be allowed to steal any of their thunder, consequently, not having had an opportunity to look up the jokes in the joke-book or in the posterior portion of the Doctor's Factotum, I am entirely at a loss to know what to say next.

I cannot, however, refrain from calling attention to the good work of the Committee on Entertainment, which has furnished this very unusual and excellent banquet. No mistake was made in the selection of men who could sufficiently influence the Board of Trade of your city by the sea to provide for us this banquet of such an unusual character and of such marked excellence. Even though our members and friends from the remote parts of the state who have never before visited the seashore and do not know how to grasp and bite the succulent clam from its membranous envelope, the tremendous heaps of the calcareous external formation, known as clamshells before each plate, indicate that the numer-

ous bivalves had been properly disposed of and we hope that they may repose quietly until the gastronomic functions shall complete without discomfort the work of dissolution.

I know that you are all anxiously waiting for me to conclude this series of remarks which can be of little interest in comparison to what is to be said by the distinguished speakers, Dr. Kelley, Judge Garrison and the rest who have had ample time to prepare post-prandial speeches and jokes of an unusual character, and realizing that I was only selected as a (dinner-resort) as the Frenchmen say, and thanking you for your attention and evident appreciation, and hoping that good digestion will wait upon this most remarkable display of good appetite, I beg to conclude.

Dr. Marcy: New Jersey has been justly proud of her educational institutions, and well she may. One of the great universities is hers, and her public school system is second to none in the country. We have with us to-night one who represents in a peculiar sense the educational institutions of our state, and he has come here to tell us something of the workings, or perhaps, I might say, the over workings, of this beneficent system of public instruction. I am glad of this opportunity of presenting Dr. J. M. Green of the State Normal School at Trenton.

Mr. President, Members of the Medical Society of New Jersey, Ladies and Gentlemen:—I wish to express my appreciation of the courtesy you have shown me by inviting me to respond for our educational institutions on this occasion. It is a significant thing when a professional body, on the occasion of its anniversary banquet, turns from its scientific specialty to give place to the cause of general education, and your action in this particular will give increased encouragement to our educational system. Your collective action in this case, I must say, is like you in your individual capacity. There have been no more potent missionaries of education in our beloved State or common country than the physicians as they have gone from home to home in the pursuit of their calling. Men of learning, they have left their impress upon the minds of the families they have visited, and many a local school system finds M. D. after the name of its chief promoter.

I am particularly pleased to speak for education in this locality, where I spent so many happy years of my life work, where a physician, Dr. T. G. Chattle, as the leading inspiration wrought a school system to such a degree of efficiency that a grateful people have erected a granite monument in a public square to his memory and have made his name a household word for generations to come by inscribing it over the entrance to their High School. The boys and girls who have gone out from this system are now filling the responsible places in our seats of learning, in law, medicine, theology, in the banks, commercial houses and elsewhere, thus abundantly demonstrating the splendid possibilities for youth through our educational system.

New Jersey has within her borders one university of first rank, three colleges of distinguished service, three theological seminaries, one institute of technology of international reputation, a number of seminaries, academies, business and parochial schools, all of which under private control and largely supported by private philanthropy are doing an important work, and have contributed greatly to the advancement of learning. From the worthy record and permanent estab-

lishment of these institutions we may turn our view for a moment to our system of public instruction, for, after all, I take it that this is of most common concern. No State or government can exist long as a free and independent people without a common nursery in which are instilled into the minds of the children the principles upon which that State is founded and in which the common needs of the people are given expression and are met. Such a nursery is our public school system. Important have been the accomplishments of this system. It has grown from the uncertain, poorly supported, isolated district school of the forties to the State supported township and city coöperative system of the present, a system supporting already more than seventy High Schools with full academic courses and under laws, the interpretation and enforcement of which have opened their doors to the child of the hillside and vale as well as the hamlet and town, and without personal cost.

Surely this is a gratifying accomplishment, but he who is ambitious for his people will not rest at this point. Charles Lamb compensated for coming an hour late to his work by leaving an hour early. We may be late in discovering some of the further wants of our system, but let us be early in meeting them.

There are three distinct forces in education: tradition, idealism and practical need. Of these perhaps, tradition has been the strongest. The public loves to copy. In that respect we differ from you physicians. You bury your mistakes; we copy ours. The man who wants his child taught as he was taught and the teacher who copies the curriculum of the school he attended are only a little more common as traditionalists than the man idealist who thinks no one is educated who does not know Greek or who has not accomplished his own specific in English. There are institutions to-day under private boards that pursue the curricula of their own personal favor, as oblivious to the public needs as though they were the sole guardians of destiny. Our education is only safe when in the hands of teachers and institutions who ask in the broad sense what is the experience to which the child must go and how best can they fit him to meet it. If to mechanics, what preparation is best; if to science, what general education will be most direct. Not what have been the traditions, not what is my own ideal; but rather what in the practice of the ablest in each line has been found best. I must not weary you by an attempt at an exhaustive review of our needed educational improvements, but I should like in closing to enumerate three particulars in which our system may be greatly improved:

First. Politics should be thoroughly eliminated. I do not refer to partisan politics so much. They have been practically eliminated, but the politics which makes use of the school board for the promotion of selfish and political ends rather than purely educational ends; the politics that substitutes the desire of the ward member of the board for the record of the pupil in the training school, which attaches more importance to the place of residence than the educational qualifications of the teacher and more importance to the local "pull" of the architect than to his knowledge of the needs of school buildings.

Second. Our educational system should come more closely to our industrial needs. We have made a good beginning in this direction in our industrial art and manual training schools and in our recognition of the laboratory practice in all

our schools, but we should go farther and honor more the principle of applied scientific knowledge. We have reached the engineer and the architect fairly well, but we should reach the mechanic and the craftsman, the agriculturist, and indeed all the more common lines of employment better. We should do this not only for the sake of our own immediate comfort but also that we may hold our place in the competitive marts of the world.

Third. Our educational system should be strengthened at the top. Our public education thus far, excepting in the one item of State patronage for agriculture, is limited to the High School. As the body cannot serve its highest purposes without a highly cultured brain, so the common body of education cannot be nourished and made most efficient without a source for highly cultured advanced learning. At present we must turn all our High School product into the hands of private parties for further training, and in the case of women must send them to other States and must rely on other States for the preparation of our women High School teachers. This should not be so. Let us hope that our own State system may soon be made complete in this particular that she may round out in full measure her place in comparison with other States and her responsibility to her youth.

Dr. Marcy: Justice and equity are not necessarily associated with the administration of the laws of a State or nation; this being true, it is not the fault of those who are appointed to execute them. Neither are the men who have been so appointed responsible for the laws they are called upon to execute. Be they good or bad, their function is merely to interpret them, and see that they are impartially administered. If we had fewer laws, and the few lived up to, both in the letter and the spirit, we would be a happier and a more contented people.

Jersey justice is proverbial, and our state is noted particularly for the prompt and efficient manner in which it is dispensed. Among our judiciary are numbered some of the great men of the commonwealth, and not by any means the least of these, is the gentleman whom I shall have the honor of presenting to you at this time. It is particularly fitting that he should be with us on this occasion, as he was one of our profession, and it is with especial pride that we see him so signally honored in the profession of the law. He is a graduate in medicine, and at one time was a successful practitioner, but having other talents, he developed them, and entering the legal profession, was soon one of the leaders at the bar. What was lost to medicine was gained by the law, and to-day he stands preëminently the leader of the judiciary. I feel honored in presenting to you Judge Garrison.

Judge Garrison's Remarks.

"The toast assigned to me is 'Expert Testimony,' and my response to it is an appeal to your ethical code to correct the intolerable conditions that attend exhibitions of professional expertism. I make this appeal because I believe that in no other way can existing evils be practically met. It is useless to look to the courts for relief. The evils have grown up under their hands, besides it is you, not they, that chiefly suffer from the professional exhibitions of which I speak. I use the word professional advisedly, for what I am saying has no application to the ordinary physician when

called to the witness stand. No class of witnesses testify with a profounder sense of responsibility and impartiality. The evils arise when the giving of testimony has become a business conducted on so-called business principles. This is done chiefly in two classes of cases, (1) celebrated murder trials, and (2) in personal injury cases. The evils are the same in each, although the cause differs. Both inflict the most serious of injuries upon your profession, and for this reason: The patient and conscientious work of a generation of physicians in private practice does not attract the thousandth part of the public attention that a single notorious trial will do. So that the one occasion the public have of gauging the state of medical science is afforded by trials of this nature. Rightly or wrongly, you are judged—your profession is judged by the men you put forward or who put themselves forward to speak for the science of medicine on these occasions. Brought in contact as the medical expert is on these occasions with the Bench and the Bar professionally, with parties and jurors representing the laity and speaking, as it were, in the ear of the whole world, what do you find? Do you find that lawyers deem expert testimony to be the unbiased truths of your science, that judges and juries rely with confidence on these utterances and that the profession of medicine is proud to point to the experts as its accredited spokesmen? How could this be so when whatever one expert says another can be found to contradict; and if two or three or four say a thing to help one side an equal number and perhaps one more can be produced to say just the opposite on the other side? Does this correctly represent the state of science in your profession? Are you not profoundly injured by it in public esteem? Is it not worth your while to correct it—to find some remedy for it that you yourself can apply? To point out such a remedy is my sole object to-night.

"Take first the case of the professional witness in damage suits. These suits, as you know, are in the great majority of cases taken by lawyers upon a contingent fee. But in the nature of the case the same contingency extends to the fee of the expert witness. If the lawyer gets a big verdict the expert gets a big fee, while if the verdict is small the fee of the witness is correspondingly less. It might seem, therefore, that the lawyer and the expert were in the same boat. But note the difference in point of ethics. The lawyer is openly the advocate of his client's cause, whereas the expert is presumably an impartial and unbiased witness, and upon the success with which he can keep up this deception as to his real interest in the result the success of his testimony depends. Is not this unethical element a matter upon which your code can lay hold to purge your profession of a most grievous ill? You are very strenuous over far less important matters. If you will prohibit physicians from assuming the role of witnesses in cases where they are made advocates in fact by the effect their testimony has upon the compensation they are to receive, you will have done more for the good name of your calling than the law has ever done for you or for itself.

The other class of professional experts, viz., those who figure in prominent murder trials, while cases or the like are amenable to the code of ethics upon an entirely different ground. These witnesses are, as a rule, handsomely paid, irrespective of the effect of their testimony—that is

not the trouble. The vice of this testimony is that it proceeds from an advocate pure and simple. The lawyers (and very properly) call in medical experts to advise them in shaping the client's case. In this both lawyer and expert are the advocates of the client's cause. If it stopped here there would be no breach of ethics. But it does not. The medical advocate goes on the stand and under the guise of being a fair witness swears through the case that he aided in preparing for one party to the cause. So here again you have the same situation, the same temptation, the same deception, the same breach of sound ethics; and the remedy is the same, viz., to prohibit the physician by your national code from acting as a witness in cases where he has advised as counsel. I can do no more than make the suggestion; it is for you to act or to let matters remain as they are. If you are content, well and good. If you will act, you will remove the most grievous blot on the 'scutcheons of both professions, for it is only in the Temple of Justice that the science of medicine is prostituted."

Dr. Marcy: The church and the State are intimately associated, notwithstanding our Constitution permits one to worship God according to the dictates of his own conscience. The medical profession and the clergy should go hand in hand on their mission of love and mercy. We recognize in the clergy one of the most potent factors of the age in the development and improvement of our country. New Jersey has always stood firmly for the Christian Sabbath, and it is a mighty force in developing what is for the best interests of our people. We must look to the church for the maintenance of this essential institution in our national life. One of the staunch defenders of this common heritage, and most important institution, is the gentleman whom I shall have the pleasure of introducing to you at this time, the Rev. H. M. Gessner, of the First Presbyterian Church of Atlantic City.

Mr. Gessner responded to this toast in part, as follows:

"I recollect that about a year ago I had the honor of responding to a toast at the annual banquet of the Climatological Association; at that time I almost finally resolved that never again would I speak on an occasion of a similar kind, because I discovered that the consciousness that an after-dinner speech is to come, has the tendency to kill the delicate accent of the French dishes, to dull the edge of the fizzing—spring water, to cause worrisome palpitation of the heart, and to play havoc with the pneumo-gastric nerve, and yet 'here I go again,' which reminds me of a friend of mine who lived in New England, a sensible, astute fellow he was, but one day another friend dropped in upon him for a little visit, only to find him with his head in a bandage, arm in a sling, and in a general state of wreck. 'What's the matter, Si?' said the caller; 'you look as if you had met with a railroad accident? How did it happen?' To this Si responded, 'Y' see I was puttin' some clap-boards on my barn, and—but come out to the barn, the scaffold's still up, and I'll show you just how it happened.' So out they went to the barn, ascended the scaffold, and as they were passing along Si said: 'You see, I was coming right along here where we are now—and I put out my foot to step on a board, thinking it was fast, but'—At that Si put out his foot, planted it on the same old board, and as the board gave way and

precipitated him to the ground, he exclaimed: 'Lickety blazes, here I go again!' I am like Si in the particular that one sad experience is not enough, but 'Here I go again.'

"The subject assigned to me, then, is the 'Relation of the Medical Profession to the Clergy.' To abbreviate and alliterate the subject, it runs, medicine men and ministers; in other words, the relation of our professions.

"Now, at first, it might seem that this is rather a large subject to be included in one small toast, and that the relation between our professions must be extraneous and artificial, produced only by birth or marriage, and not really at all related in principle. But such is not the case. A little reflection will reveal to us that we are much more closely related than the thoughtless might infer. We are related in origin, to begin at the beginning. This is evidenced in Mr. Herbert Spencer's work on sociology—that man who seems to be so familiar with primitive times and primitive peoples that one might suspect him of being one of them did not his age betray him.

"By the way, his talk about primitive man and primitive customs is really unscientific and inaccurate. Speaking truly, and speaking largely, I presume we are fifty thousand years or more removed from primitive man; the people of whom he writes and speaks so voluminously and so learnedly may be uncivilized people, degenerate people, but by no means primitive people.

"However, says Spencer, in a chapter in his Sociology headed 'Medicine-men and Priests,' which is really our theme for to-night, 'Among the Patagonians, the same men officiate in the three-fold capacity of priests, magicians and doctors.' Likewise, 'Among the North American Indians the functions of sorcerer, prophet, physician, exorciser, priest and rain doctor are united.' 'So too,' Ellis says, 'that in the Sandwich Islands the doctors are generally priests and sorcerers.' It seems to me, therefore, when we consider our noble origin sociologically, in those early days before there were divisions of social function and differentiations in labor, it is hardly fair for 'pot to call the kettle black.' And as the Southerner might say, 'We cannot disclaim "kin".'

"Moreover, this historical and genetic relation is plainly indicated as existing between the professions in the study of those little preserve-jars of history called 'words.' The term 'cure,' which you use so often, and which your patients wish you might use more often, from the Latin 'curo,' has both a physical and a metaphysical meaning. It signifies 'to restore to a healthy or sound condition physically' or psychically. This common meaning appears most clearly in the common use in the French language of the word 'cure,' applying it now in a medical and now in a clerical sense. The word 'cure' without an accent corresponds to our ordinary use of the word, but the word 'cure,' with an accent, signifies 'priest' or 'pastor.' Now, without doubt, originally the word 'cure' was applied to both the physician and to the clergyman. Just how it came to pass that we appropriated the title of honor, making it to-day to apply only to the clerical calling, I am not sure—unless it be true that we 'delivered the goods' and so took the title. Although it may be due to the grasping nature of the clergy, for even to-day they are not content to allow the medical profession to rejoice in the title of 'Doctor,' but seem to be reaching out after that also.

"As we are related in origin, so are we related in object; what the doctors are trying to do for

men on the physical side, the ministers are striving to accomplish for their fellows on the spiritual side. We are each trying 'to make men whole,' and is it not an inspiring and an ennobling work? Again we are related in the underlying principles of our practice. We are each of us seeking to bring men into right relations with the power that is without them. Man is a dependent being; he is not self-existent, nor self-sustaining, nor self-sufficient, but everywhere dependent for the power that is within him upon the power that is without him. How clearly is this manifested on the physical side; he is dependent upon air and water and food and light and heat. We are all, in truth, children of the sun, and the physical power we have comes from the King of Day.

"In the matter of man's dependence on food, how quaintly and wisely old Sir Thomas Browne, a man of like profession with yourselves, has spoken in his 'Religio Medici.' There he says: 'Nay further we are what we all abhor, anthropophagi and cannibals, devourers not only of men but of ourselves; and that not in an allegory but a positive truth; for all this mass of flesh we behold came in at our mouths; this frame we look upon hath been upon our trechers; in brief, we have devoured ourselves.' Thus as we are dependent for the power that is within us upon the power that is without us, the Almighty hath equipped us with those instruments and agencies for mediating this power without to this man within.

"What is that organism which we call our body but a complicated system of agencies for appropriating, assimilating and distributing that power without to the man within? And this both physically and spiritually. We are also related in our need of each other. The clergy have bodies and must needs have the counsel and guidance of those who have made the body their special study. We will assume that the doctors have souls and we know that they are not averse to consulting those who have made the hygiene of the soul the special object of their consideration. How often and how well we work together. After the doctor goes out of the home, how often it is that the minister is called in—to perform the last rites for the departed (story).

"These being briefly the facts of the case, what a pity it is that our very real and very close relation is viewed in such a false light by some of the more narrow-minded of either profession. What a pity it is, that there are those of the opposite profession who do not look upon their brothers in work, as brothers, nor friends nor yet as fellow-laborers, but rather regard the relation as the average married man regards his mother-in-law (story).

"But, my friends, there are better days coming; there are evidences abroad even now showing that the professions are drawing more closely together. It almost looks, at times, as though the good old primitive days would return; those simple, early days when 'the doctors were priests and sorcerers.' What with the ministers practising healing; and what with the doctors practising faith-cures—there is surely evidence 'that there's a good time acoming.'

"Only at the last meeting of the American Medical Association in Atlantic City, by chance, I saw on the book table of a single firm three books bearing suggestive titles. One was the 'Influence of Mind on the Body,' another was the 'Psychic Treatment of Nervous Disorders' by

Dr. Paul DuBois of Berne, and still another 'The Force of Mind' by Dr. Schofield. It would almost appear as though the tables were turning, and that the day will come when the clergy will have to rush in and rescue the medical men from running over into the extreme of spiritism.

"I cannot close without expressing my admiration for that noble, serviceful, self-sacrificing profession which you have the honor to grace; nor without uttering the wish that the doctors might more closely ally themselves with those visible forces and institutions which are making for righteousness. We do not care to deny that we have need of the doctors; we do need them; they are men of thought; men of sense; men of influence; men of position; men who would strengthen any cause with which they might be allied. And we fondly trust that you have not the desire to affirm that you have no need of us; nor to deny that you have any need of allying yourselves to the spiritual power that is without you, that you may live the fullest, broadest, best lives possible.

"One thing is sure—from the same home we are come forth, to take a little journey in the world, to labor a little day in life's fields, to do each his own work in his own way for a little while, and then to turn again home. Let us realize our relation as brothers here, that we may recognize our relation as brothers there."

Dr. Marcy: Among the great men of the profession of medicine is the one whom I am now to have the honor of introducing to you. He is pre-eminent as a surgeon, as a teacher, as an author, but particularly to him as a man of high ideals and noble purposes would I invite your attention at this time. A Christian gentleman, an exemplar of all that is good and noble, tender and true. It affords me the greatest pleasure to introduce to you Dr. Howard A. Kelley, of Johns Hopkins, Baltimore.

Dr. Kelly responded in substance as follows:

It gives me great pleasure to address the New Jersey State Medical Society, as I come among you not as a stranger, but as one belonging to the state and to its associations by right of birth. Born in Camden, N. J., and ushered into the world by that good old family practitioner, Dr. Cooper. In my college days I still found New Jersey an attractive spot, and a place to find many rare botanical specimens; I recall particularly the hunt of *lelonias bellata* in the swamps below Gloucester. Later on, the residence of relatives, and the friendship of Dr. A. H. Smith made Long Branch attractive, and to-day many of my warmest friends are residents of this state, including Runyon, Freeman, Brown of Montclair, my classmate Hepburn of Freehold, your next President Ill of Newark, your President Marcy, a particularly cherished friend, the Marvels of Atlantic City, and a host of others. Prof. J. B. Smith, your State entomologist, is one of the scientific men of this country for whom I have the greatest admiration and affection. I feel further that I can present my claims for your kindly consideration just now with particular good grace, in that your able Secretary, William J. Chandler, is coöperating with me in a *Cyclopedia of American Medical Biography*, on which I am engaged, while your President Dr. Ill, has undertaken to write a chapter in a *Medical Gynecology*, shortly to appear.

I am glad that Dr. Marcy has taken up in his presidential address certain things touching the moral and spiritual welfare of the profession

Without these elements, whatever eminence attained in material things, the benefits will be but transitory. These are the true vital elements of every individual as well as of every social organization, and any course in life pursued without them is suicidal. Dr. Marcy has spoken particularly of the responsibility of the physician in regard to the use of alcohol, of dangerous drugs, in countenancing the recognized but terrible evils of abortion and feticide, and his responsibility in promoting purity in public morals. To all that he has said, I am glad to add a hearty amen, and to assure him and you of an active, earnest co-operation in attempting to realize such ideals. I fear my professional brethren sometimes weary a little when, on an occasion like this, some orator arises to speak of the great strides made in medicine within the past generation, and yet, I am sure, we do not dwell half enough upon an important theme. There is no room for impatience in dwelling upon such a glorious theme. Do we weary of breathing the sweet air, and enjoying sunshine and all lovely things of nature, simply because we have experienced them all so often before? I have a particular reason, therefore, in dwelling briefly upon the important fact, that we are living in the Golden Era of medicine. Take a glance down the centuries, from the days of the Father of Medicine nearly five hundred years before Christ, consider the early centuries of the Christian era, when the great Greek physicians were so active, pass in review the later centuries of the Christian millenium when the Arabic physicians were the leaders of the world, and a galaxy of glorious names, too familiar to be repeated, still continue on down through the last four centuries, beginning with the foundation of modern scientific medicine in Versalius' *Anatomy*. Sum up all the great things done in these great ages and the work of the last generation overtops them, presenting a total vastly greater than that of preceding centuries. We therefore stand to-day inheritors of the labors of three thousand years, and of the colossal monumental works of our immediate predecessors.

And having inherited, what sentiment should first fill the breast of those who consider the great blessings of our present age? A sentiment of pride and boast about our achievements? A taking of the credit of all these achievements to ourselves? Rather let me express my profound conviction that the most important thing is a spirit of thankfulness for these great blessings, a sense of profound gratitude for all that has been given for the relief of suffering humanity. To live in a day of preventive medicine is perhaps the greatest boon of all; and had you asked an eminent physician of a century ago, what blessings he would first seek for the race he might well have answered a knowledge of the cause of and ability to control yellow fever, malaria, tuberculosis, typhoid fever and diphtheria. All of these great boons now lie within our grasp. Diphtheria is shorn of its dangers; yellow fever is banished forever from our shores; while typhoid fever and tuberculosis are thoroughly understood and controllable if knowledge possessed is knowledge used.

But here, standing on the glad eminence of success, our ambitions about to be realized, we find progress impeded by an extraordinary selfishness, particularly in the cases of tuberculosis and typhoid fever. The attempt to make effective war against the former involves the wage

question, and, therefore, a readjustment in relationship of employer and the employé; there is, also the question of food, housing and house-keeping, of water supply, of suitable playgrounds for city children. In other words, we come in contact with great moral problems, and we cannot be insensible to an obvious and widespread immorality in the lack of a sense of responsibility of a man for his neighbor. Here, we, of the medical profession, begin to realize that our influence is like that of the gentle raindrops, when we need the force of concerted action and would like to control the power of Niagara. It is my pleasant mission here to-night to herald the coming of this power in the medical profession. Within the past decade and a half the profession in this country has been undergoing a process of welding, of solidification, of unification; I see the evidences of it on all sides; a new sense of solidarity is taking possession of the medical profession. Nowhere is it so evident as at the meetings of the American Medical Association. Our confrères are organized *pro bono publico*, and as a rule look with contempt on such artificial differences as are expressed by the party politician of the day. We are the only body, the only party if you will, which has a great moral cause at heart, and is determined to carry it through. In the state of Ohio I am told that a great act of injustice done to the medical profession has been regulated by the profession acting as a man in defeating and dismissing from public service one of the most noted and active politicians of the day. We have a most valuable organ for promoting this solidarity in the splendidly managed *Journal of the American Medical Association*. I shall be glad when the day comes when one or more of our leading medical men are seated among the Senators at Congress, and I look forward to the time when they shall put one of our members in the presidential chair of the United States. The medical profession is the only body of its kind in the country which has the unity which can be used to bring about this desirable result. If the medical profession will act in unison, and the whole tendency of the profession is now in that direction, we would not only elect one President but every President for years to come.

Let me here utter a word of warning; it is not for self-glorification, not for power, nor for a mere material object that we must thus unite; useful these are as instruments, but not to be made the end of our corporate self. The nations of the past which rose out of obscurity into activity and world-wide eminence, so erred and so disappeared. Assyria, Egypt, Greece, Rome, Italy teach us this lesson, and it is the lesson of all living nations to-day. Each one had some definite ideal; each, some particular way of expressing national life and unity; each, in turn, made all necessary sacrifices to attain its desired end; and each, equally, made such particular objects the be-all and end-all of their seeking, and so became decadent. The fault lay in non-recognition of the truth that any object sought for material ends, however high, is unworthy of the ambition of spiritual beings, and these things which attract men, and for which men make sacrifices should be as cords to draw them Godward. If man in his seeking does not seek Him and find God, and so through Him come into relation to all Truth, the seeking is in vain. It is this recognition of God and responsibility to Him which unites us to those pedagogues who are not

mere imparters of instruction, but have to form the character of the future race, to the judges who stand in God's place, little pictures of His justice and righteousness upon earth and to the clergy who are His servants. We advertise on all the silver coinage of our land "In God We Trust." Let us not be convicted of hypocrisy; let us seek to be as consistent in our religion as the heathen are in theirs. Can we send away our best blood into distant lands as medical missionaries, applauding their labors and successes, while we discourage similar activities in our own midst?

In conclusion, our ideal then is to work for suffering humanity. We best attain this and all gracious ends by a perfect solidarity and fraternity, to which all should be subordinate private interests. This attractive program will prove of no advantage to the profession unless it be recognized that our ideal is but a partial expression of the love of God towards men.

Dr. Marcy: Our State Society, with its enviable and honorable record of one hundred and forty-one years in the service of humanity, is an inspiration. Its past has been honorable, its present is a satisfaction, its future is brilliant, and he whom I will present to you, to tell you of all these things, is one of its most devoted and faithful members. Few of us have done as much to advance its interests, and none are deserving of more praise. His reward will come, I am sure, and at no distant day will his name be enrolled as one of the Fellows of this Society. I present Dr. Enoch Hollingshead, of Pemberton.

Dr. Hollingshead spoke as follows:

"In speaking of the Medical Society of New Jersey, the oldest state society in America, its past, its present, its future, the mind naturally turns very largely to its illustrious past. There appeared the following in the *New York Mercury*, June 27th, 1766, one hundred and forty-one years ago to-morrow: 'A considerable number of practitioners of physic and surgery in East New Jersey, having agreed to form a society for their mutual improvement, the advancement of the profession, and promotion of public good, and desirous of extending, as much as possible, the usefulness of the scheme, and of cultivating the utmost harmony and friendship with their brethren, hereby request and invite every gentleman in the profession in the province that may approve of their design to attend their first meeting, which will be held at Mr. Duff's in the city of New Brunswick, on Wednesday, the 23d day of July, at which time and place, a constitution and regulations of the society are to be settled and subscribed.'

"At the appointed time sixteen physicians met and agreed to form themselves into a society to be called and known by the name of the New Jersey Medical Society. This name, however, has been changed at times. In 1790, to the Medical Society of New Jersey, and 1816, to the Medical Society of the State of New Jersey, by a supplemental act, by which name it has since been known. The first constitution, with its lengthy preamble, is well worthy of perusal, as it indicates the purpose and aims of our medical forefathers and their objects. This, however, was not a legal act, and did not give the physicians at the time any legal standing in their respective communities. It was not until September 6th, 1772, that an act was passed by the Governor, General Assembly of the Colony of New Jersey, in the twelfth year of the reign of their sovereign, Lord King George the Third of England. This enactment gave them corporate rights, also the right to

establish a fee bill for services, and also an examining board for medical license, which board was appointed by the state medical society, whose recommendations were referred to two judges of the Supreme Court, who gave the candidates the legal status or license. To speak of the men who established this Society in detail would bring a roseate hue to yonder east; that they were men of high character and noble ambition, is shown by this fact, that the first signer of the resolutions and the first president of the society was not only a physician but an ordained minister of the Gospel, who has ministered to his people both physically and spiritually, and was highly esteemed in both, who fell by death at the early age of thirty-five. This society continued to grow, increasing in numbers, holding annual and semi-annual meetings until 1775, when the war of the American Revolution, claiming the attention of all ranks of freemen, was discontinued, until November 17th, 1781, when it again met by advertisement. Starting under such favorable auspices and at such a time, the Medical Society of New Jersey could not fail to stamp its patriotic and noble impress upon its members, for, out of its first twenty-two presidents, seventeen were either commissioned or non-commissioned officers in the American Revolution, and later, one of its presidents was said to have been a surgeon to the royal troop of England, and another of its presidents, it is asserted to have attained the age of 123 years.

"For the achievements of those medical men, during the War of the Revolution, their valor, their skill, the historian of the past has, and the historian of the future must, forever leave a line of white across the page. Here, let me say, the physicians of this state have not been seekers for office, but they have given to the state, since the adoption of the new Constitution, two governors, and that both in humanity's name, have left their impress upon their country's laws, both state and national. The one (Fort) in committee and as governor, formulated and put in force the laws for the insane of the state, some of which were penned by his own hand. The other (Newell), the friend and adviser of the immortal Lincoln, and an honored member of this Society, framed and put in force, and gave those marine signal service laws to this country along our coasts, by which the helmsman, plunging through the night, must feel that succor is at hand, should he unfortunately strike the shore; also that this Society (not of its own volition) surrendered to law, the eminent jurist you have heard to-night. Who of us, whose heads are silvered o'er, do not remember with pleasure the song we used to sing, 'O, don't you remember Sweet Alice Ben Bolt,' the song for whose beauty and pathos was translated into every written language and sung in every civilized tongue. Its author, Dr. English, was an honored member of this Society. Many of our members have held positions of honor in legislative halls, both state and national, whose voices were always heard in behalf of their profession and their country's honor.

"The present condition of the Medical Society of New Jersey is active, aggressive, ever looking toward the rising sun, and its present status can well be attained by looking over this assemblance to-night. At this, our annual meeting, we meet to perfect our organization, to discuss all that pertains to advancement of our profession. These meetings cement and form new friendships, and give to all higher aspirations and nobler ambitions,

and its newly established monthly journal should be the heart throbs to give it a strong and healthy existence, and make its members equal to the best physicians of modern times.

"Of the future, who may know or tell, but in the language of the late president of the American Medical Association, the people of the future will choose their physicians, not from what college he or she may graduate, but from the character and number of medical societies to which they belong. Pathology and preventive medicine are opening up a field more inspiring to the student in the future than in the past. That pathology is still seeking for new fields to conquer, and aided by the microscope and laboratory are searching out and illuminating the dark path-ways of disease, also the management thereof. And now, when the plans of the great American Medical Society, to make each county society a post-graduate school, must give an impetus to scientific medicine, which is usefulness, will carry it far, far beyond the hopes of the medical fathers of the past. For the more scientific medicine advances, the more must empiricism recede. The more the hopes of the founders of this Society be realized.

"When I think of the past, of the great and good men who have gone before, and think of their usefulness, looking down into the future, I can exclaim with the poet:

"We stand sometimes in mute dismay
To see our great men die. Their place
What living man can fill? We say
Their thoughts what lesser minds embrace?
Our loss we murmur in despair.
So much devised, so little done
A voice cries through the viewless air
The hands drop off, the work goes on.

"Time proves it so: no wheels are stopped:
Science and progress hold their own:
The mantels that our brothers dropped
On other shoulders have been thrown.
Worn loosely for a time, perchance,
But as the sire shall grow the son
God leads himself the grand advance,
The hands drop off, the work goes on."

Dr. Marcy: The ladies, God bless them. It would be an unpardonable breach of etiquette not to include them in the list of toasts this evening, and they were not forgotten, but being in a class so distinctively by themselves, it seemed almost a sacrilege to include them with ordinary men, and things. Therefore, it is that they did not appear on the program for a formal toast, neither did I deem it wise to ask any particular individual to respond for them, knowing only too well the rivalry existing among the gallant male members of our Society. I am going to propose this toast, and ask our distinguished, courtly, Chesterfieldian editor, Dr. David C. English, of New Brunswick, to respond to it.

"Woman, the greatest gift of God to man. Her influence greater than that of any other individual. Absolutely indispensable to the successful practitioner of medicine. The silent partner in the business. Her influence potent for good."

Dr. English said that at that very late hour he certainly would not inflict upon them a lengthy prepared speech, but would offer "a few feeble remarks"; that he approached the task assigned him with mingled feelings—of thanks for the honor conferred in asking him to respond to such a toast; of surprise that he, who did not pose as a post-prandial speaker, had been selected, when

so many distinguished orators like his friend Dr. W. B. Johnson (who felt so badly that he was not invited to respond to this toast) were present; and, third, with a feeling bordering on displeasure that he had been asked to speak on *such a theme for five minutes only*. "Why, Mr. Toastmaster, it would take me ten minutes to warm up to my subject, then I would need at least half an hour to do it any kind of justice and ten minutes more to make a practical application to the poor, miserable bachelors present who had thus far neglected one of their most important privileges and duties." He supposed, however, that the Committee acted upon the idea that the most valuable articles were delivered in small packages. He accepted that explanation, excused the committee and would take the liberty of exceeding their time limit for the benefit of the bachelors. "You have, then, put into my hands the diamond. Vain are all attempts to describe its beauty and its value; there it is, from every facet flashes forth its brilliancy—it speaks for itself. So with woman, she is with us to-night. Her value and beauty need no setting forth by me, even had I the orator's gift of eloquence—she speaks for herself. Here let me say that the Medical Society of New Jersey confers no empty honor on woman by offering a formal toast. We invite them to our annual meeting, have them grace with their presence our sessions and listen to our papers and discussions and I would be willing to let them talk—it is said they have that gift; at any rate we will have them shine. My friends, Drs. Vander Veer, of Albany, and Kelly, of Baltimore, who honor us with their presence to-night, tell me they never have them present in their State Society meetings. They have learned something from New Jersey; they like our custom, and they ought to go back and stir up their societies that they may have in their meetings the light and brilliance of the diamonds."

The doctor then paid a fitting tribute to woman as mother and wife, taking up the points mentioned in the toast. He was not sure that she was in all cases a *silent partner*. Speaking of the Great Physician, he said: "He came into the world *born of woman*, thus putting the highest honor on woman and He always honored her. He has also honored man through that most sacred gift—mother, and in giving him woman as a helpmate. Why, not one of us would be here to-night had it not been for woman—mother, and how much we owe her, and many of us owe no small share of our success in, and enjoyment of life to His other inestimable gift—a good wife." The doctor closed with a few words to the bachelors, whom he declared had sadly neglected a very important part of their education and ought to be brought up before our State Board of Medical Examiners. He told the story of the Irishman who lost his devoted wife at the birth of her son, and he was so saddened and disgusted that he took his infant son to an isolated spot where he would never see a female, and there he brought him up till he was twenty-one years of age, when he took him to an Irish fair where he saw scores of pretty Irish girls. The boy was so delighted and captivated by their appearance that he exclaimed, "Father, father, what are they?" and the father replied, "Goats, my son, goats." The boy in earnest, beseeching tones asked, "Father, father, won't you buy me a goat?" He appreciated beauty and worth—had more sense than some men have.

Dr. English said: "Now bachelors, you have

not been brought up in isolation and ignorance; you ought to know a good thing when you see it, and appreciate its worth; you don't behold goats but deers here to-night; they can't be bought, but it is possible they may be caught—they may say yes in an effort to win them. Doctors' daughters make good wives, and if you can quickly decide, there is a clergyman here to tie the knot, or, if you prefer, Judge Garrison will accommodate you." The doctor closed with the couplet:

"Woman—she's all my fancy painted her;
She's lovely! She's divine."

Papers By New Jersey Doctors.

Personal Hygiene in the Prophylaxis and Treatment of Consumption.—Dr. Richard Cole Newton, of Montclair, read this paper at the annual meeting of the Amer. Climatological Ass'n, remarking upon the relative prevalence of tuberculosis in the lower animals under varying conditions of habit and environment, and considered some of the predisposing causes of tuberculosis in man other than heredity. Conclusions were drawn from the foregoing as to the method of life best calculated to prevent the occurrence of consumption in man. Tuberculosis was shown to be a disease following maladaptation to the environment, improper habits, and defiance to nature's laws, and the assertion was made that nothing would stop its ravages entirely except a life controlled by the physical conscience and the prevention of the contraction and spread of the disease. Were dairy cattle given more exercise, and never confined in stables, the author believed normal metabolism would be promoted, and that they would probably not suffer from consumption. In the same way, should negroes and Indians return to their life to which centuries of evolution had fitted them, the disease would probably disappear from among them in a generation. Infection was said to play a secondary part in the production of consumption, as did also heredity, the principal cause being a man's life, habits, and environment.

Paroxysmal Tachycardia.—Dr. Philip Marvel, of Atlantic City, in his paper, read at the annual meeting of the Amer. Climatological Society, said that the slight physical disability incidental to paroxysmal tachycardia, and the promptness with which the slightly disturbed functional forces were again restored, following the arrest of the attack, should the attack be of short duration, contrasted with the marked disability often observed in tachycardia associated with myocardial disease, present two interesting features, and to some degree symptomatically characterize the two types. In the paper presented there were collated some of the recent views advanced as the probable cause of the disturbance and the probable reason pointed out for the absence of great systemic involvement in the former. Two cases were reported and reference made to cases reported in the literature. To the fact that the cardiovascular balance, early in the attack, in spite of the very rapid heart action, is so slightly disturbed, is attributed the absence of marked physical inability. The treatment, so far as the author knew, was said to be purely symptomatic.—*N. Y. Med. Record.*

Prevention of Peritoneal Adhesions by Adrenal Salt Solution, with Especial Reference to the Pelvis.—Dr. Emery Marvel presented this paper before the American Medical Association.

He said peritoneal adhesions resulted from a pathological process active within or adjoining to the peritoneum. Their formation was Nature's effort to combat an injurious process in which adhesions were good and a protection to the organs. In many cases they were injurious and it was desired to prevent them. The thin-walled vessels of the peritoneum favored free exudation of serum and became the agent by which the surfaces were united. Now in an operation the dilated blood and lymph vessels gave a leaking orifice with exudation that meant adhesions. To prevent adhesions the purpose was to dilute the serum and thus hasten absorption and prevent further exudation. Then, too, the irritated surfaces should be kept apart until partial repair had taken place. In order to remove the irritant and release the parts salt solution might be used, and then should be added to this, for the purpose of preventing further exudation, adrenalin chloride. The salt solution aided absorption of the secretions and the adrenalin prevented the exudation of further secretions. The bulk of the fluid kept the surfaces apart and thus the threefold purpose was accomplished.

WHO MANUFACTURES THE NOSTRUMS AND PATENT MEDICINES—IN OTHER WORDS WHO MAKES DOPE FOR QUACKERY?

Some time ago we aroused quite a furore in certain quarters—and the echo is still reverberating throughout the country—by asking the following question: Who manufactures the patent medicines and quack nostrums? In other words, who furnishes quackery with the dope? This question was justified by the fact which is well known in pharmaceutical circles, that the vast majority of the preparations with which the laity is being pestered and poisoned so energetically and so persistently are not as a rule made by the people who are the real owners and promoters. Practically all the proprietors of the fake patent medicines have not the slightest idea of chemistry and manufacturing pharmacy, and it would be as impossible for them to make an elegant pill or tablet, to fill a soft capsule, or to make a palatable, compatible mixture as it would be to solve a problem in differential calculus or astronomy.

At the meeting of the A. M. A. at Boston, Dr. Keblor of Washington, Chief of the Drug Laboratory, Bureau of Chemistry, United States Department of Agriculture, showed that a very large proportion of the nostrum manufacturers (95 per cent. perhaps) have no laboratories of their own, but their remedies are made in the laboratories of the great and supposedly ethical pharmaceutical houses, which are soliciting the business of the doctor—a business which these houses are at the same time secretly undermining. They say it is "business"; we say it isn't fair. It is a direct incitement to quackery, for we have no doubt that many of these quacks would not go into business at all if they had to construct their own formulas, build their own laboratories, employ chemists, etc. It would be too troublesome and too risky, while the great so-called ethical houses make it very easy and smooth sailing for them. All the quack has to do is say for what ailment he wants that particular nostrum to be, and the great houses put their knowledge, experience and facilities at the quack's disposal. They construct his formulas, make the preparations, label them artistically and attractively. In short, everything is done to make

quackery attractive, and all the nostrum proprietor has to do is to pay the bill and then push his dope onto the credulous people.

As a contribution to the discussion of the secret-nostrum question and as essential to its solution, this question must be answered. Justice can be done in no other way than by telling all the truth. It is incumbent upon the Council of Pharmacy and Chemistry and the Journal of the A. M. A. to possess themselves of these facts in their entirety and to let in the light. The inquiries are becoming more and more insistent and already official action has been taken. For instance, the Section of Pharmacology and Therapeutics at the Boston meeting passed a resolution which read in part as follows:

"The Section learns with regret that certain manufacturing pharmacists have practically placed the facilities of their plants at the disposal of venders of some of the worst and vilest nostrums by which the people of the United States have been defrauded. It is obvious that such practices cannot be too severely condemned, especially if the patronage and confidence of the medical profession is to be retained."

The Kansas State Medical Society has also positioned itself, for at its annual meeting in May the following resolution was passed: "Resolved, That manufacturing pharmacists who have engaged in whatever extent in the making of nostrums are hereby requested to abandon such manufacture, either directly for their own trade, or for exploitation by others."

It is up to the doctor to probe further in this matter. Who is it that is making "cascarets," for instance, or "Carter's pills," "Stuart's dyspepsia tablets," "damiana wafers," "force of life" remedies and a score of other things sold directly to the laity? Do you propose to remain in partnership with the men who make the "patents" and "nostrums"? Do you approve of a business policy that preaches and lobbies for "ethical" preparations with the doctor, while it "borrows" the formulas of men who really originate successful proprietaries, supplies the druggist with ready-made mixtures for counter prescribing, and solicits (on the q. t.) the immensely lucrative business of men who are selling trainload after trainload of habit-forming "dope" to the laity—to their harm and your business injury?

These are questions which it is worth your while to consider, and by the solution of which it is worth your while to be governed in the conduct of your own business.

We have no desire in any degree to tear down any honest business structure; we would impede the progress of no conscientious man; but we can no longer keep silence on this subject which is of so great importance to the medical profession—that which is the very backbone of quackery and fraud—that which renders their bombastic and soul-and-body-wrecking methods possible.

Let us assume that it is pure thoughtlessness, that when the matter is brought to their attention they will stop, but let us keep a weather eye on them to see that they do it—stop and stay stopped—that years of honesty and loyalty to the profession may at least attenuate the injury and disgrace they have caused to the profession.—*Editorial American Journal of Clinical Medicine.*

THE MEDICAL INSPECTION OF SCHOOLS.

It will not be long until the State will look after the health and physical development of children

as well as their intellectual growth. The practical results in New York are astounding, and it is inconceivable how those in charge of our municipal school systems can neglect the institution of those methods which promise so much to the physical welfare of the younger generation. Prophylaxis is the guiding principle everywhere and the time is not far distant when the acute contagious diseases will be, like smallpox, among the rarer epidemics. What terrible neglect it is to allow a child with nasal diphtheria, for example, to attend school a week or more before he is isolated! Why should the child be tortured with prolonged daily study, who has a defect in vision or hearing?

The function of school inspection has been well stated by Lovett: First, to detect infectious disease in its early stage, thus cutting down the danger of contagion; second, to detect and cure or provide for defective children; third, to improve school conditions.

What infectious diseases should be included under the contagious disease necessary for isolation? Upon a few all are agreed, but there are others—the acute respiratory infections, for example—to which serious objections might be offered, if an attempt be made to place them in the class which needs isolation.

No doubt, this problem will be gradually solved, but there is already enough work so that the organization of municipal medical inspection of schools can be commenced at once.—*Exchange.*

THE RELATIONS OF EDUCATION TO GROWTH.

Dr. J. Milner Fothergill, in an essay on "Adolescence," delivered some years ago, said:—

Childishness remaining late indicates the imperfect or feeble in mind, but a distinction exists betwixt childish children and slow children. The charming writer, Oliver Wendell Holmes, once discoursed with subtle power upon "late pears." He said: "Men often remind me of pears in their way of coming to maturity. Some are ripe at twenty, like human gargonelles, and must be made the most of for their day is soon over. Some come into their perfect condition late, like the autumn kinds, and these last better than the summer fruit; and some that, like the winter helis, have been hard and uninviting until all the rest have had the season, get their glow and perfume long after the frost and snow have done their worst with the orchards. Beware of rash criticisms; the rough and stringent fruit you condemn may be an autumn or a winter pear, and that which you picked up beneath the same bough in August may have been only its worm-eaten wind-falls."

Now, this is very true; and the big, dull lads of the schoolroom and playground are not always dunces. They are often really "late pears," and will develop slowly, and in time, into able men of strong intellectual power. The prospects of the precocious child and the "late pear" are very unlike, and infinitely in favor of the latter. To some extent the same holds good of girls, who resemble—I beg the sex's forgiveness for my freedom—rather the precocious boy than the late pear. The nervous organization of woman favors early development, and age for age girls are ahead of boys, just as in their physical stature; but in mind and body alike their growth does not go on so long as is the case with boys; they reach their utmost development earlier than boys, but the

male intellect outstrips that of the female at last. Early maturity, which is intimately linked with precocity, is most undesirable; it indicates a low standard of development. Not only does this hold good of the individual; but it is true of the mass. Town children attain their full stature, according to Quetelet, at an earlier period than country children; but the average height of country children is above that of town children. The countryman grows more slowly than the townsman, but then he goes on growing long after the time when growth has ceased in the townsman; so it is intellectually. The child brought up in towns, and especially London, lives in a perpetual whirl of excitement compared to the life of a child reared in the country. The one is living his life, spending his energy, while the other is storing his force. The one is eating his cake, the other is keeping his. At fifteen the little cockney is far in advance of the country child, who looks a heavy lout by his side, in all knowledge of the world, but in the race of life the cockney, though still advancing, ceases his development comparatively early, while the countryman is going steadily on. At twenty-five the cockney is still ahead some way; but at thirty-five he has lost his lead, and the countryman is considerably ahead; at forty-five the cockney is not in sight, and is hopelessly behind. What is true of the cockney and the country-bred child *en masse* is also true of the individual; and, though bright children are undoubtedly pleasant to associate with, the slow child frequently makes the abler man when middle age is reached. With some children then it is desirable to hold them back; while with others, stimulants to exertion are required. But the sharp child must not hold the slow child too cheap, especially if the slow child belongs to a stock endowed with brains. Of course, families vary materially; some are much brighter than others. The child of a dull stock will probably be dull all along the line of life. The child belonging to a bright, sprightly family will also be of quick parts when young; but that does not materially affect the truth of the argument—that early development is antagonistic and opposed to final development. It is notorious that the races for two-year-olds are exercising a most pernicious influence upon the stamina of our race horses. A horse that has been well fed and not been put to any work till its full growth is attained at six years old, is a better horse, can do more and will last a great deal longer than a horse of equal qualities by descent and otherwise, which has been put to work betwixt the ages of three and four. So it is with men: the full growth should be attained before the intellect is severely exercised for the full development of it in maturity. It is the *mens sana in corpore sano*; precocity counts off so much from the ultimate and potential development. ***

It is quite clear that if a child be put to severe study, the demand upon it will tell upon its body development and physique. What will be the effect of the present insistence upon competitive examination on the physique of the next generation remains to be seen. Education must necessarily be carried on during the period of growth; that is inevitable. The battle of life is fought with the brain now, and not so much with muscles, thews and sinews, as of yore; and the brain must be trained, come what may to the body. But growth is not a steady increase upwards, like an inclined plane; it consists of periods of active growth, and then an interval of quiescence, like that of trees and other vegetable growths, which

shoot in spring; only the periods of growth in children are less rhythmical and more irregular. This is an important fact, both for teachers and children. During the period of active growth the bones are elongating and the muscles have to keep pace with them: The blood is drawn to the growing parts, and away from the brain, which consequently is starved, and thereby rendered inactive. The child is comparatively stupid and lacking in intelligence; its ordinary tasks become a toil to it; it feels it cannot cope with them as it is wont. Perhaps it becomes depressed thereby and is unhappy; more commonly it is punished for idleness or carelessness. But when the period of active growth is over then the child brightens up, struggles successfully with its lessons, and quickly regains the lost ground. Sometimes the period of active growth is brief, at other times it is prolonged. At times the child is utterly incapacitated from pursuing its studies, and has to be sent to the seaside. This subject has not received the attention it merits, and which it will before long command. It is cruelty, and cruelty of a very objectionable character, to compel a child to pursue its studies when actively growing, to say nothing of punishments inflicted where blows would be preferable to tasks, and impositions which only increase the demand upon the over-taxed brain.

Nervous Diseases of School Children.—This is an interesting question from the point of view of one who has had exceptional opportunities to observe the frequency with which school children are affected with nervous affections; 1,857 children were so examined, with the result that 130 were found to be affected—that is, 7 per cent. In a material of 1,068 children who had not attended school, 2.6 per cent. were found to be nervous. The author believes that the chief causes of the development of nervous diseases in school children is to be found in an inherited tendency, to which the school acts as an active awakening to this congenital defect.—*Meyer, Berl. Klin. Woch.*

A New Hysterical Condition Among School Children.—Schütte, *Münchener Med. Woch.*, says that in the city of Meissen there has existed since last December a widespread epidemic among school children of a peculiar nervous affection locally called the "trembling sickness." The patients are mostly children between the ages of nine and thirteen years, girls being the most susceptible. The affection first manifests itself by a more or less protracted period of nervous unrest, which is followed by the gradual development of a trembling of the right forearm and hand, which in severe cases extends to the left side also. The seizures of trembling last from a few minutes to half an hour and recur at varying intervals, sometimes appearing also at night. The disease, it appears, has spread rapidly, the children apparently becoming the victims of a form of autosuggestion. The treatment necessitates a removal from school and rest in bed for a time, followed later on by gymnastics and open-air exercises.—*N. Y. Med. Record.*

Eye-glasses for School Children.—The Board of Education of New York City is considering the advisability of providing spectacles for those of the pupils in the city's public schools who require them. According to a report made by the Committee on Elementary Schools, about 36,000 children in the schools, or about 6 per cent. of the total number, are suffering from visual defects that

demand correction if the scholars are to profit to the full by the opportunities for study given them. The committee submitted four resolutions intended to cope with the problem. The first of these suggested that the Board of Estimate be requested to appropriate \$30,000 for the purpose of fitting up centers for the examination of children whose sight is defective and to provide eye-glasses made to prescription. The second resolution provided that the Department of Health be requested to furnish thirty expert oculists to examine the eyes of all the pupils of the public schools who are referred to them by the medical examiners in the schools. The third authorized the Committee on Elementary Schools to invite five prominent oculists to advise the committee as to the equipment of the examination centers. The fourth authorized the Committee on Supplies to secure bids for the equipment of the examination centers and for the supply of eye-glasses, in the event of the Board of Estimate granting the appropriation asked. It is estimated that all the spectacles necessary could be purchased for about \$6,000.

AMERICAN PHYSICIANS AND THE DISTORTION OF TRUTH.

The spirit of picturesque untruth is in the air. Again our sober and strenuous ideals of life are disturbed. A new equation of values has been thrust upon us to perturb our spirits, to excite us into righteous indignation because our heretofore unshakable faith in the good possibilities of human nature has been rudely jarred.

We are a patient people, we of the medical profession, and do not generally cavil at things, be they quite important, unless envy and hatred are responsible for foolish and silly personalities. But when nice young men, who had "to toil onward, pricked with goads and stings" at their respective medical schools, come back from Europe and vaingloriously boast of their achievements in foreign lands, we really feel like very poor critics for not having recognized at once (that is before they sailed away) their transcendental mental gifts. That some of them profit by their European sojourn is evident to the unbiased, but that European professors immediately recognize their worth, and with extraordinary graciousness brush others aside to greet them, to propitiate them, aye, to adopt them, seems to us a delusion peculiar to inexperienced youth recently recovered from a plunge into cosmopolitan waters.

Cheek-by-jowl friendships obtain among equals, occasionally, but even our splendid complaisance will not allow us to entertain the idea that our raw material, with its lack of a fair knowledge of languages, its gaucheries born of a hampered and cramped early intellectual life, is carried triumphantly through the clinics of Berlin and Vienna by professors whose learning is indubitable, but whose manners belong to a category where, as yet, there is no differentiation between the niceties and vulgarities of the table, or conversational subtleties and insolences, things that make for refinement, graciousness and bonhomie. And yet we are compelled to listen to long spaces of dreariness wherever a number of newly arrived and newly advertised doctors see fit to exploit their egomaniac European experiences.

Theirs is not a step towards a higher plane of knowledge as would be evidenced in a highly prized contribution to a medical publication, but a fulsome account of "my successes with certain professors." Science stands abashed at this; and

Time hangs his head to think of the sheer waste of all the precious moments of youth, moments that should be dedicated to better things than vain-glory and self-conceit. But unfortunately all this is not realized by these advocates of the last refinements on self-praise. Months, sometimes years, pass before the asininity of their attitude is brought home to them. Only when "my dear Professor from Vienna or Berlin" happens along and cold-shoulders them, do they feel what insignificant entities they are in the Professor's cosmos.

Thackeray says in one of his books that a good Briton is never so pleased and elated as when he is fortunate enough to walk down Pall Mall, sandwiched between two dukes. The same might be said about our sprightly doctors, who are still suffering from a veneer of their idea of European culture derived from contact with one or another "dear Professor," were they ever fortunate enough to hold converse and parade proudly between two real German professors on our streets. But German professors are far less gracious than Thackeray's dukes, and he of American birth and three months' European culture, can count himself fortunate if a slight nod is accorded him when "my dear Finger or my dear Von Bergmann" is on a visit to this country. For it is patent to all that these men carry with them an aura of academic greatness which they think should place them beyond the pale of mere American practitioners who once upon a time spent two or three months in their clinics.

Our dissidence with the recently returned American physician would not have the insurmountable barrier it has at present were he to tell the truth in plain, unvarnished terms. Let him confess his successes, his failures, his achievements, his struggles. But at the same time, let him cease his bombast, his blatancy, for its futility is of the sort that happens when one dry stick is rubbed upon another in the hope of generating a flame.—*Kansas Med. Soc. Journal*.

MEDICO-LEGAL.

The Dangers of the Motor Omnibus.—The motor omnibus in large cities bids fair to become of acute interest to the medical profession. In London the recent manifestation of public opinion against motor omnibuses on account of the noise produced by them was largely supported by medical men, and has to some extent diverted attention from the actual danger of life and limb arising from the manner in which these vehicles are driven, as well as from the defects inherent to their construction and to the method of their propulsion. The incident, however, when one of these omnibuses skidded, mounted the pavement and charged the parapet of Waterloo Bridge, brought to the minds of many the accidents likely to become frequent, at any rate in the metropolis, in the season when greasy roads and fogs are to be expected; and the result of an action tried by Mr. Justice Bigham, and reported in the newspapers on November 1, has not tended to reassure nervous persons who use the streets in order to go about their necessary business. Such foot passengers would wish to see every preventable accident brought home to the motor driver and to his master, but the summing-up of the learned judge in the case referred to seems to absolve the owner of the motor omnibus from a most important section of his liability. The accident inquired

into was the result of skidding on the part of an omnibus owned by the London Motor Omnibus Co., whereby the plaintiff, Thomas King, was injured, and Mr. Justice Bigham is reported as having told the jury that they would have to say whether the vehicle was being driven at excessive speed at the time of the accident, and that every miscalculation of distance on the part of the driver did not amount to negligence. "They were all liable to errors of judgment, and it would be unfair and unreasonable to say that every error of judgment was the result of negligence." With regard to suggestions that the omnibus was improperly constructed, he pointed out that there was no evidence of this, and added that people could not be expected to anticipate every improvement that might be brought out in the next half century.—*London Lancet*.

Authority to Perform Operation.—Where a patient desires or consents that an operation be performed, and unexpected conditions develop or are discovered in the course of the operation, it is the duty of the surgeon, in dealing with these conditions to act on his own discretion, making the highest use of his skill and ability to meet the exigencies which confront him, and in the nature of things he must frequently do this without consultation or conference with any one, except perhaps, other members of his profession who are assisting him. Emergencies arise, and when a surgeon is called it is sometimes found that action must be taken immediately for the preservation of the life or health of the patient, where it is impracticable to obtain the consent of the ailing or injured one or of any one authorized to speak for him. In such event, the surgeon may lawfully, and it is his duty to perform such operation as good surgery demands, without such consent. But where a surgeon performs an operation, without first obtaining the consent of his patient, the patient being in full possession of his mental faculties, and in such physical health as to be able to consult about his condition, and no emergency arising making it impracticable to confer with him, the surgeon is legally responsible in damages. Pratt vs. Davis, Supreme Court of Illinois, 79 N. E. Rep. 562.

Right to Collect Operation Fee Based on Oral Promise of Third Party.—Where a physician performs an operation upon a patient and a third party verbally promises to pay for the services of the physician the promise to pay is not actionable if the services were rendered wholly or partly upon the credit of the patient or upon his original promise to pay. If any credit whatever was given to the patient at the time the services were rendered, so that he was in any degree independently liable, then the oral promise of the third party is invalid. John vs. Bank, Supreme Court of Appeals of West Virginia, 55 S. E. Rep. 394.

Revocation of License to Practice.—State Medical Examining Board et al. vs. Stewart (*Supreme Court of Washington*, 1907) 89 Pac. 475.

Appellant's license to practice medicine and surgery had been revoked by the State Medical Board on the ground of unprofessional and dishonorable conduct. By statute, it was provided that a conviction of any offense involving moral turpitude should constitute "unprofessional or dishonorable conduct." Appellant contended that the statute of limitations applicable to ordinary civil actions

could be invoked in his defense here. The court in passing upon this matter, said:

"It is unnecessary for us to decide the technical question presented whether this is a civil action, within the meaning of the statute, because we are satisfied such statute does not apply to this case in any event. The object of the statute was to prevent immoral or dishonorable persons from procuring licenses to practice medicine in this State, and, if persons having licenses were found to be unprofessional or dishonorable, then their licenses might be revoked. The character of the person at the time the charge of unprofessional conduct is made controls his right to the license. The character is proved by his conduct in the past. A conviction of any offense involving moral turpitude is made conclusive evidence of unprofessional conduct. It is not contemplated by the statute that the examining board shall try the accused and find him guilty of an offense involving moral turpitude when there has already been a trial and conviction. Such former conviction by a court of competent jurisdiction is conclusive evidence of the moral character and professional conduct of the accused at the time the charge is made against him. The statute, therefore, constitutes a rule of evidence in such cases, to which the statute of limitations does not apply."

DR. WARD AND THE TRENTON HOSPITAL.

The following editorial, taken from the *Salem Sunbeam* of August 9th, shows how those who know Dr. Ward esteem him:—

Here in Salem, where John W. Ward was born, we have watched his course with delight that one of our sons should by his own ability and energy reach such a high position in his chosen profession. With the recent developments in the Trenton Hospital for the Insane, where Dr. Ward has given all the best of all his years, our people are not familiar and refrain from discussing. The brutal retirement of Dr. Ward by the managers of the institution they resent. His eminent services in that institution entitled him to an honorable retirement. He has reached nearly the limit of man's age—three score and ten, and the infirmities of age doubtless spared him no less than they spared other men, and for the good that he has undoubtedly done in the past there should have been among the members of that Board at least one man to enter an emphatic protest against the disgrace that was meted to him. As the Warden of the institution was given a saving grace—something that was denied Dr. Ward—our people are all the more indignant. Salem loves Dr. Ward and he will ever receive a warm welcome here, and to that welcome will be added a wealth of sympathy for his unjust treatment. And the feelings of the people of Salem in the matter are intensified when they realize that one of the members of this Board of Managers who heaped indignities on the head of Dr. Ward hails from this county.

The *Newark Evening News* in an editorial in its August 16th issues says:—

And speaking of the new manifestation of the incompetency of the board of managers recalls again the drastic treatment meted out to Dr. Ward and the soft persuasion extended to Warden Hayes. The former was, after forty years of

service, the most of which was earnest, skilful, devoted and successful, unceremoniously kicked out, dismissed in disgrace, mainly for telling the truth; while the warden, who was to a much greater degree responsible for the filthy conditions in and around the hospital and for the epidemic of typhoid, was courteously permitted to resign; the resignation to take effect several weeks later.

Without excusing Dr. Ward for any derelictions properly chargeable against him, it may even yet be said that forty years of faithful service entitled him to being made something else than a scapegoat for political purposes. But the board of managers never loyally supported him, he was not privileged to attend its meetings, had no control whatever over the grounds—they being under Warden Hayes's exclusive care—and the State Board of Health did not make their complaints to him, but to the managers and the warden. Yet the board kicks Dr. Ward out and allows Hayes to resign. * * * What adds to the indignity of this unwarranted discrimination is the fact that Dr. Ward, on more than one occasion in the past two years, spoke of resigning because of impaired health, but was urged not to do so. * * * This whole disgraceful hospital controversy needs to be investigated much deeper than the Backes probe has yet gone, and the board of managers should be peremptorily gotten rid of before any other political appointments are made.

IMPORTANT NOTICE.

The Committee on Legislation would call the attention of the members of the County Societies to the near approach of the primary elections. Interview the prospective candidates and if possible get their approval of matters of legislation in which we are interested. Get the chairman of your County Committee (political) interested in our position and his influence will largely control the candidates. We would like to see several physicians in the Legislature at the coming session. There are many counties in which there are men of ability who could spare the time and who would be a credit to their constituents. Let us have at least three or four medical men in the next Legislature. Do not neglect this. It will greatly lighten the work of the State Society in securing wise rather than harmful legislation.

Let us have a good report from every county.

L. M. HALSEY, Chairman.
Williamstown, N. J., Aug. 26, 1907.

Uniformity in Pharmacopœias.—The Belgian Academy of Medicine at a session devoted to a discussion of the discrepancies in the official pharmacopœias in use in the different countries adopted a resolution recommending the government to take steps toward the formation of an international commission having for its object the establishment of a permanent bureau to work for greater consistency in this respect.

THE JOURNAL

OF THE

Medical Society of New Jersey.

SEPTEMBER, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

PRIZE ESSAYS.

Prizes were instituted by the Medical Society of New Jersey at the annual meeting in 1905, and are open for competition to the members of the component (county) medical societies.

The subject is: "Feeding During the First and Second Years of Infancy."

The essays must be signed with an assumed name and have a motto, both of which shall be endorsed in a sealed envelope containing the author's name, residence and component society.

The essays shall not contain more than 4,000 words, and must be characterized by originality in investigation and thought, and by clearness and conciseness of expression and be, in the judgment of the committee, of decided value to the members of this Society and to the profession generally. Failing in these respects no award will be made.

The essays, which should be typewritten with the sealed envelope must be placed in the hands of the committee on or before the 15th day of May, 1908.

The committee will select the first two essays in order of merit. To the first will be awarded the prize of one hundred dollars, to the second a gold medal of the value of fifty dollars.

The unsuccessful authors will receive back their essays upon their identification to the chairman of the committee. The successful essays will be the property of the Society and be published in the JOURNAL of the Society.

CHARLES J. KIPP, Newark, *Chairman*,
DAVID C. ENGLISH, New Brunswick,
WILLIAM ELMER, Trenton.

DO OUR EDUCATIONAL METHODS NEED CORRECTION?

This month brings us to the season of the year when, after a long vacation, our schools, seminaries and colleges resume their work. Every physician is interested, or ought to be, as an educated man, a physician, a well-wisher of the young and as a lover of his country, in the character of that work and the outcome of it, especially as the health interests of our families, the community and our country are concerned in the physical and mental development of our children and youth. The charge that our educational methods have been exceedingly faulty in this direction has engaged the serious attention and thought of the medical profession, and, we are happy to know, of some eminent educators. Far more consideration is being given to the hygienic condition of school buildings and their surroundings; to the guarding of the pupils' health from contagious and infectious diseases, and from eye-strain and its consequences through medical inspection and to their proper development during this—the formative period of life.

Our educators too often have failed in the past to fully realize the wisdom and force of, and to act upon, the old adage, "Mens sana in corpore sano." They have sought to develop the mental faculties alone instead of to properly develop the growing boy or girl—mentally, physically and morally, and we fear they have too often lost sight of the meaning of the word educate—from *educio*—in cramming the memory with facts and figures, the meaning of which the mind fails to grasp and assimilate, instead of training the mind to think and comprehend, and training the boy to understand and take proper care of his body, that mind and body should grow symmetrically and be sound. As a result we have seen scores, as doubtless most physicians have, of young men and young women who instead of having been fitted by our schools and colleges for life's activities, have been incapacitated therefor. It is a question for serious thought for our philanthropists and statesmen as well as

physicians and educators whether the large and increasing numbers of cases of hysteria, neurasthenia, ovarian and uterine disorders, and indirectly of immoralities have not had as one of their most potent causative factors these faulty methods of education. We should understand and act upon a proper knowledge of the relations of growth and health to education. In another part of this JOURNAL will be found extracts from an excellent essay by Dr. J. Milner Fothergill on Adolescence, bearing on these relations, which is worthy of careful perusal.

We believe the ideal method would be the education of the individual child, adjusting the studies and physical exercise to his mental and physical requirements. If that is impossible or impracticable, grading the pupils in classes according to mental capacity and physical conditions. The indiscriminate crowding together the mentally bright or precocious and the dull, the physically strong and the weak and partially diseased and putting the same high-pressure on all alike, is not only unwise but it is positively harmful. There is another feature of the high-pressure system which we believe is fraught with great danger to the nervous, delicate pupils, especially girls approaching the period of puberty—the anxiety and intense strain connected with competitive contests and severe examinations for promotion and graduation. We cannot now enlarge upon these phases of the educational question. We introduce them to invite study and discussion, and will be pleased to receive brief communications from any who have given the subject close study. One of our ablest New Jersey school superintendents has said:

“I take the ground that educational theory universally accords supremacy to the physical side of education wherever it conflicts with the educational side; that because of our almost universal apotheosis of training in the three R's we neglect most shamefully considerations of health and growth. As proof of the supreme importance in my mind of the physical side of education, I would personally be willing to have a health officer as a ranking officer of the city's superintendent, with plenary powers as to all matters relating to the construction, adaptation to school requirements, sanitation and hygiene of school buildings and all connected therewith. He should have all the powers that are accorded to health boards in respect to contagious diseases.”

We do urge that physical education shall be efficiently taught and physical exercise be scientifically applied in our schools as far as possible or practicable according to the requirements of the individual pupil. In matters of such transcendent importance it is a sad fact that corrections or improvements of methods are prevented or delayed by the ignorance or false pride of parents, the indifference or dislike of innovations that may possibly cause more work, on the part of our school authorities, and the short-sightedness of our legislators in making inadequate appropriations for measures of the highest public importance involving the health, the lives and the productiveness of our citizens. One writer has well said: “The schools determine more than anything else the character of our citizens and our country.”

We believe three things are especially needed at the present time in the endeavor to make our educational institutions a strong bulwark of State defense and a potent factor in moulding the character of her citizens and in developing her resources; thereby maintaining and still further advancing her high standing and influence: 1. Legislation making the medical inspection of schools compulsory instead of optional as at present. It has passed the experimental stage; its wisdom and success have been demonstrated. 2. The appointment of the ablest medical man procurable—a specialist in this department—even if it costs \$10,000 per year to secure him, as a member of our State Board of Education, who shall, from the medical view-point, pass upon the various school curricula, arrange and supervise the physical exercises of the schools and the system of physical education to be taught therein; receive the reports of the medical school inspectors, acting with them in an advisory capacity and possibly outlining their work in order to secure uniformity and efficiency. 3. That the members of our profession shall take a more active interest in the cause of education, and as medical men educate the parents, the public and our legislators on the dangers of the cramming system, of the correlation of mental and

physical training, and in meeting the adverse argument of cost and extravagance show them that it is worth all it costs, with the added argument—of force to the intelligent man who is capable of weighing and valuing aright future benefits to himself, his children and his State—that money spent on educational institutions for the perfecting of their equipment, methods and work is really not money spent, but money invested, that is sure to bring returns every year of vastly more than the amount thus invested. The satisfaction that comes to the parent, the citizen, the physician, and the legislator in intelligently and conscientiously doing all they can for our children and youth, for their sakes and in behalf of our State and country pays richly.

TYPHOID FEVER IN THE DISTRICT OF COLUMBIA.

We have received Bulletin No. 35 of The Hygienic Laboratory, Washington, D. C., which consists of 361 pages with numerous carefully prepared and valuable charts and maps. It is the Report of the Origin and Prevalence of Typhoid Fever in the District of Columbia by Director Rosenau and Drs. Lumsden and Castle. While it shows most thorough study of existing conditions, it seems the subject has by no means been exhausted, as it is to be continued with a view of determining the presence or abuse of the typhoid bacillus in the Potomac River water, in well water, in milk and other foods, and also to determine what percentage of the population may act as bacillus carriers.

It is not creditable to us that the Capitol of our Nation should have the record for prevalence of this disease that has existed for several years, and that the engineering projects adopted failed to bring the desired results, or if so the relief was of short duration. Even with the introduction of the extensive slow sand filtration plant for which Congress appropriated nearly three and a half million dollars constructed under the supervision of the Engineering Corps, U. S. Army, the relief seems to have been for

only a few months when comparatively little typhoid fever existed, yet suddenly in July of last year there occurred a rather extensive epidemic of it—866 cases occurring between June 1 and October 31, 1906. During the year 1906 one person in nearly every 300 of the population of the District of Columbia had typhoid fever.

The Report of this Board is worthy of study and its future investigations will, we trust, lead to the adoption of some methods that will result in freeing our Capitol from the discreditable record of the prevalence of this "filth disease."

The Board found that about 10 per cent. of the cases were attributable to infected milk; about 15 per cent. were imported; about 6 per cent. were traceable to "contact." The morbidity rate was a trifle higher and the mortality rate much higher in the colored than in the white race; the bulk of cases occurred between the ages of 10 and 30, a large number of children under 15; a marked rise in the number of cases occurred with the advent of hot weather—July, but the disease declined while the weather continued hot and moist—middle of August. The secondary rise in October was largely a milk outbreak. The disease had no local focus but was distributed uniformly throughout the inhabited portions of the city, which would suggest some common factor as the principal means of dissemination. It was most prevalent among those living in residences of the better class—not among those under poor sanitary conditions. Generally in houses connected with the city sewerage system, in which there were water closets; only 72 of the cases occurred in houses with privies. Several figures are given which tend to show that the disease did not prevail to any special extent among houses where flies were abundant. Among the houses where there were domestic animals we note the principal ones only, dogs 197 cases, cats 266, chickens 133 cases. Of fruits and vegetables, shell fish and fresh water fish and ice it is said they do not seem to have played any appreciable part in spreading the disease; 85 cases were attrib-

uted to infected milk, 6 of these to infected ice cream.

Of 747 cases, 96.54 per cent. gave a definite history of having used unboiled Potomac water, supplied through the city system, as the sole, principal or occasional source of water for drink purposes during 30 days prior to the onset of illness; 310 drank soda water. The report dwells at some length on prophylaxis, the milk problem, the pollution of the Potomac River and other matters to which we will not refer. Of the sand filters it says:

"The water is greatly improved both bacteriologically and chemically by the storage and filtration. It was known before they were installed that slow sand filtration alone could not at all times render the Potomac water clear, and experience has shown this to be correct. Some other treatment, such as increased storage, preliminary filtration or the occasional use of a coagulant during periods of high turbidity is necessary in order to obtain a clear effluent at all times. It is reasonable to expect that continued experience and further experiments with the special problem in hand will result in still further improvement in the filtered water, especially so far as turbidity is concerned."

The report closes in presenting the arguments pro and con as to whether the Potomac water plays an important part in the dissemination of typhoid fever in Washington and closes the presentation with these words:

"Therefore, the board reserves final decision on this subject until investigations now in progress at the Hygienic Laboratory have been completed."

We cannot forego expressing our belief from the weight of argument presented, and especially from the facts of the uniform distribution of the disease throughout the city, and that the vast majority—96.5 per cent. of the cases studied gave a history of having drunk unboiled tap water within 30 days prior to the onset of the disease, tends to show that the water supply was at least one of the principle factors in the origin and spread of the epidemic. Still we must ad-

mit the board takes the scientific method of deciding the question. We must hold our opinions subject to the evidence that further scientific investigation may reveal.

The Washington epidemic has had a tendency to shake the confidence of many in filtration as the solution of the problem of ridding our towns and cities of this disease, and yet we must as scientific men recognize the facts that this disease is exceedingly prevalent throughout our country and that it has its origin from other sources as well as from infected water supply; and also that our filtration systems are not yet absolutely perfect, nor will they absolutely prevent an occasional outbreak when there is careless or faulty management by incompetent men. Give us a good filtration plant with experienced, competent men in charge, keep politics out; then adopt equally efficient means to destroy other sources of infection and this "filth disease" will be stamped out, and it will mean in New Jersey alone thousands of lives saved, and millions of the State's resources annually saved, at least a hundred times more than the amount properly expended in installing and honestly maintaining protective measures that our scientific knowledge approves and experience has demonstrated as effective.

THE STATE HOSPITAL FOR THE INSANE AT TRENTON.

The reports concerning the bad management of the State Hospital for the Insane at Trenton are not yet sufficiently clear to form an intelligent judgment as to the exact degree of individual culpability of the men charged with its management. There are some questions which are pertinent, and we are entitled to answers that are not evasive or untrue. Why was Dr. Ward unceremoniously discharged without being heard and the warden permitted to resign? Such treatment was unduly harsh and we ask—Was it not inexcusable when administered, by men who were not entirely free

from responsibility for the existing conditions, to a man who had rendered forty years—the best years of his life—to the service of the State in that institution? Why did the managers for a long time delay meeting the sanitary requirements that the State Board of Health decided were imperatively and immediately needed and so notified *the managers*? We emphasize the fact that the managers were notified, not Dr. Ward, as under the by-laws of the board of managers, adopted in 1901, the grounds in their exceedingly unsanitary condition, which probably caused the spread of the typhoid epidemic, were strictly under the jurisdiction of the warden and managers. Dr. Ward had no power over the matter, nor was he invited or expected to attend the meetings of the board.

Is it within the range of probability or possibility that Dr. Ward would have given the testimony he did about the ill-treatment of Silvers if it was not true and thus voluntarily criminate himself? If there was no truth in it and the managers were not informed about that ill-treatment, why were the two men discharged after the managers, through their committee, had investigated the matter? As we understand it Dr. Ward did not intend the construction put on his testimony that that ill-treatment *directly caused* Silvers' death, but that it *possibly* might by blows he received over vital organs have hastened it. Was he discharged for telling the truth? Could Dr. Ward, who has rendered 40 years of most valuable and efficient service at a very moderate salary, have been neglectful of his duties for months and years and the State authorities, the managers, assistant physicians or the Commissioner of Charities and Corrections have not been cognizant of such neglect; or, if cognizant took no steps to correct it? The doctor has been much impaired in health the past two years and we know he has more than once expressed his desire and intention to resign his position, especially on the completion of his forty years of service, but he was advised not to do so by some of his friends.

We think enough has been brought out to show that the public is not likely to have much confidence in the Hospital's present management and that it is an imperative necessity that the ablest alienist that can be secured be placed in charge as Medical Director and be given the power the position requires for highest efficiency. The citizens of our State have a right to demand this for the welfare of the poor unfortunates for whose proper care the State has assumed responsibility, and for the honor and good name of the State in maintaining its institutions. We add another word. At a time like the present when party spirit is running high—preceding a State political campaign, and charges are likely to be made for the purpose of manufacturing political capital, suspicion is apt to be aroused against all our institutions which is utterly unjustifiable and calculated to impair their highest efficiency and prevent men of ability and integrity from accepting position therein. We believe that thorough examination should be made of the conduct of these institutions in a proper business-like manner without political bias. If our State officers and legislators would make such examination—which is their duty, instead of neglecting their supervision, as President Eisele of the Morris Plains Hospital board of managers charges, and if the managers were selected for their good judgment and business ability instead of for political reasons—to please political bosses; and if they were paid five hundred, or even a thousand dollars per annum (they certainly ought to be paid a liberal per diem fee for days of service) there would be better management, more freedom from graft, and far less occasion for expensive investigations with their fearful revelations, which are exaggerated for political purposes, even if the State is disgraced by false or misleading reports.

The vacation season, we presume, is responsible for our failure to receive one paper and the return of proof of another we had expected for this issue of the JOURNAL.

THE STATE BOARD OF HEALTH AND THE HOSPITAL EPIDEMIC.

It gives us great satisfaction to know that there is at least one institution in our State in which medical men have largely control and management, where that management has not been marked with political manipulation and graft. Under Dr. Ezra M. Hunt's admirable supervision and care the State Board of Health's affairs were honestly and efficiently conducted, and his successor, Dr. Mitchell, has carried out the same policy, supported by an able board that has had the health interests of the State as the only object sought. The action of this board in reference to the epidemic of typhoid fever at the State Hospital, Trenton, has been characterized by intelligence, promptness and—as far as authority and power has been vested in the board by existing laws—with efficiency. Or—to be more exact, we should say—their advice to the hospital managers would efficiently have checked the spread of the epidemic had it been promptly followed. The State Board has not been clothed, by legislative acts, with proper authority in such cases—its action not being mandatory, but advisory. Had there been equal intelligence and promptness on the part of the hospital managers we believe the epidemic would have been checked weeks ago; but even now—August 22d—there have been no adequate measures adopted, and new cases occurred nearly every day up to and including August 13th. We are informed by credible persons in position to know, that the convalescent patients are allowed to mingle freely with the unaffected inmates—an exceedingly dangerous thing, as we intimated in an editorial in our March issue, that the time when the restored patient ceases to be a carrier of the infection is very difficult to decide.

Dr. Mitchell has been criticised by the daily press for saying that he does not know, and that we may possibly never know the original cause of this epidemic. He spoke as an intelligent, scientific man should speak. It is the part of wisdom and honesty, and in

keeping with the true spirit of scientific investigation to say "I don't know" when a man is not *sure* of the basis of his statements of opinions. Mr. Know-it-all is sure, by talking, to exhibit his ignorance. We may theorize on the etiological factors of this epidemic, and in our effort to get at the source, let us take in another possibility beside that of the supposed sewer source of infection. We are informed by credible persons, in position to know, that a man entered the hospital from Trenton, as long ago as last February, who had typhoid fever; that he roomed with another man and he contracted the disease. Is it possible—is it not probable that that was really the starting point of this epidemic?

Again we say it is not in keeping with the true spirit of scientific investigation to jump at conclusions. As we have noted in another editorial some of the ablest scientific men in our country, bacteriologists and other sanitary experts, in the Hygienic Laboratory at Washington, D. C., have been investigating for months the origin of the typhoid fever epidemic in that city in 1906; they have issued a bulletin of 361 pages, and in it they declare that they had not yet been able to come to any decision as to its exact cause, and they are still pursuing their investigations. Let the investigation of the Hospital epidemic at Trenton go on, but let the one practical thing that calls for immediate decision be carried out at once—STOP THE SPREAD OF THIS EPIDEMIC BY THE ADOPTION OF APPROVED MEASURES FOR ITS CONTROL.

This epidemic confirms and intensifies our conviction that we should have legislation which will give to the administrative department of the State Health Board executive authority in addition to the advisory power the board already possesses, and equip it to summarily deal with all sanitary questions of grave importance which may arise. We know that Dr. Mitchell and Judge Lanning are in full accord as to the needed legislation. Mere politicians who are seeking to advance their own political interests and their private gains by ques-

tionable methods, and some men who might lose position and power would doubtless oppose adequate legislation to efficiently safeguard the public health and save human life. If so, the medical profession and honest citizens generally should use their influence for the welfare of the State and her citizens in a determined and persistent effort to secure it.

LIFE INSURANCE COMPANIES THAT ARE NOT SEEKING CHEAP MEDICAL EXAMINERS.

We are pleased to add to our list of old-line insurance companies that are now paying a \$5 flat rate for medical examination the Mutual Life Insurance Co., of New York—they have restored their former rate. We are awaiting others; which will be next? The present list comprises the following.

Ætna Life, Hartford, Conn.
American National, Galveston, Tex.
Citizens Life, Louisville, Ky.
Capital Life, Denver, Col.
Colorado National, Denver, Col.
Fort Worth Life, Fort Worth, Texas.
Manhattan Life, New York City.
Massachusetts Mutual Life, Springfield, Mass.
Mutual Benefit Life, Newark, N. J.
Mutual Life, New York City.
National Life, Montpelier, Vt.
Northwestern Mutual, Milwaukee, Wis.
Pacific Mutual Life, San Francisco, Cal.
Provident Life and Trust, Philadelphia.
Reliance Life, Pittsburg, Pa.

We believe these companies are thoroughly reliable, that they do not pay their officers excessive salaries. They should be favored in every way possible by the members of the medical profession.

IS THIS RIGHT?

When you buy from the grocer, do you tell him how much you are going to pay for sugar or flour or bacon? Do you generally allow your patients to say just how much they are going to pay? Are lawyers in the habit of allowing their clients to fix their own charges? Put this way, all these things seem absurd, yet that is exactly what has been done in our case. The old-line insurance companies, with a brazen impudence that is almost hypnotic, have said to us, as to slaves, "We will pay you \$3 for our examination—be thankful to get that much. Our high officials have stolen so much money

that we must economize, and we believe that you doctors will take what we offer and say 'thank you.' " Are you going to allow the patient to fix the fee? Why not make insurance examinations for nothing? Why not do all your work for nothing? Why not live on sawdust—or starve?—*Calif. State Jour. Med.*

COMMITMENT OF THE INSANE.

Our attention has been called by Lawyer Church, attorney of the Essex County Hospital for the Insane, to the confusion and inconvenience that has been occasioned by physicians using the wrong blanks in the commitment of patients to the hospitals. He says:—

"A revision of the law relating to the commitment of patients into hospitals for the care and treatment of the insane was passed by the Legislature of 1906—Chapter 324 of the pamphlet laws of 1906. Its passage has made necessary several changes in the form of the commitment papers heretofore used. New blanks have been prepared by the Managers of the State Hospitals for the Insane, and should in all cases be used. The old blanks are no longer legal, and should be discarded. The proper forms may be had from the County Clerk."

NEW JERSEY SANITARY ASSOCIATION.

The thirty-third annual meeting of the New Jersey Sanitary Association will be held conjointly with that of the American Public Health Association at the Marlborough-Blenheim Hotel, Atlantic City, September 30th to October 4th. The afternoon of Tuesday, October 1st, has been set aside for the program of the New Jersey Sanitary Association, which will consist of the annual address by the president, Dr. Gordon K. Dickinson, of Jersey City, on "The Evolution of Associations—the State Sanitary in Particular"; and a Symposium on The Ideal Milk of the Future: 1. Ideal Dairying and Transportation, by Prof. R. A. Pearson, of Ithaca, N. Y., and Prof. E. B. Voorhees, of New Brunswick, N. J.; 2. Ideal Milk: Natural, pasteurized, condensed, dessicated—Sanitary and dietetic values; 3. Ideal methods of local distribution—civic or individual; 4. Ideal control—government, state or civic, Boards of health or commissions—The latter philanthropic or appointed by central authority—the Governor. Medical control, by Dr. H. L. Coit, of Newark; Municipal Control, by Dr. Thos. Darlington, of New York City.

General topic to be discussed by Dr. C. B. Lane, of Washington, D. C., and others.

The members of the State Association will meet with the American Public Health Association and participate in the discussions at their sessions. The hotels have granted reduced rates, and the committee of arrangements, of which Dr. Edward Guion is chairman, has provided entertainments for the pleasure of the members, chief of which is the annual dinner on the evening of October 2 in the Hotel Marlborough-Blenheim, which will be the Association's headquarters.

OUR CONSTITUTION, BY-LAWS AND TABLE OF FEES.

There will be issued with the October number of the JOURNAL a supplement containing the Constitution, By-Laws and Schedule of Fees, revised to date, in order that every member shall receive a copy. Additional copies will be printed for future use.

Therapeutical Notes.

Catarrh Ointment.

℞ Sodium perborate, in fine powder 4.0 grammes
White petrolatum 20 grammes
Sandalwood oil 10. g. s
M. ft. unguentum.

Cerebrospinal Meningitis.—Menschig that found the following useful, reporting four recoveries out of five cases:

℞ Pilocarpinæ hydrochlor 0.03 — 0.04
Aque 200.0

Solve. S. A teaspoonful every one to three hours till sweating occurs. The above is intended for children under ten years of age.—*Medizinische Klinik*.

Chordee.—W. J. Robinson states that the following are useful prescriptions:

℞ Codeinæ phosph gr. 1-3
Heroini hydrochlor gr. 1-12
Camphoræ monobrom grs. 2
Lupulini optimi grs. 3
Ext. rhamni purshianæ grs. 2
M. Ft. caps. No. 1. Sig.: Take one capsule before retiring.

Sometimes suppositories prove the most efficient, and the following is an excellent combination:

℞ Codeinæ phosph gr. 1-2
Atropinæ sulph gr. 1-120
Antipyrinæ grs. 5
Ol. theobromæ grs. 15

M. Ft. suppos. No. 1. Dentur tales doses No. 12. Sig.: Insert one before going to bed; another one may be used during the night.

To relieve the actual attack, the patient should wrap a cloth or towel wrung out of ice water about the member, or put it in hot water, as hot as can be borne. If the desire to urinate is present at the same time with the chordee, the patient should urinate in the water. Swallowing pieces

of ice has relieved many patients, but whether suggestion plays a part here or not is hard to determine.—*American Journal of Clinical Medicine*.

Eczema Ointment.

℞ Beta naphthol 3i;
Sulphur 3ij;
Balsam Peru } of each, 3i.
Petrolatum }

M. ft. unguentum.—*N. Y. Medical Journal*.

Furunculous Acne of the Neck.—The irritation of the collar sometimes gives rise to a papular eruption, which soon becomes a furuncle, and may also develop into a carbuncle. Sabouraud (*La Clinique*, August 10, 1906) says that the agent to employ in all these cases is sulphur. And the best formula is the sulphur wash of Vidal:

℞ Precipitated sulphur 10.0 grammes
Alcohol (90 per cent.) 10.0 grammes
Distilled water } aa 50.0 grammes
Rose water }

After shaking the bottle, this is to be applied with a piece of absorbent cotton, each night, and in the morning the spot is washed with soap. This is the fundamental treatment of all cases of acne and will cure fifty per cent. of the cases. Individual cases may require special treatment. If there is deep suppuration, the hair of the neck should be epilated with tweezers. If the furuncle enlarges, and becomes much indurated, the galvanocautery is useful. If there is ulceration, and a fistulous granulating surface, it should be touched with a pencil of silver nitrate, and of zinc. But whatever the form of furunculous acne of the neck, the treatment should commence with the application of the sulphur lotion. If this proves to be insufficient, other treatment may then be added. Among the most efficient may be named the X-ray treatment. It has also been observed that certain springs containing sulphur are useful. Of course, all local sources of irritation should be avoided, such as tight, or rough-edged collars.—*N. Y. Medical Jour.*

Pruritus Ani.—Drueck says that when the pruritus is due to proctitis, hemorrhoids, fissure, ulceration, fistula, prolapse, or polypus, and the patient refuses to submit to surgical treatment, or in senile, debilitated, or hemorrhagic subjects, much relief may be given by the use of the following:

℞ Calomel gr. 30
Menthol gr. 10 to 20
Vaseline 3 i

Sign.—Apply after each bowel movement, bathing the surface carefully, and sopping it dry.

For eczema of the anus he employs:

℞ Picis liquidæ 3iv
Ung. belladonnæ 3ii
Ac. carbolicæ m. x
Adeps lanæ 3 ii

Bathe the parts repeatedly in water as hot as can be borne, and in green soap, to remove the thickened scales, and to deplete the local circulation. In exaggerated cases, a solution of caustic potash, five grains to the ounce, may be used. A cloth may be used to sop the hot water on the parts, but do not allow any rubbing.—*Chicago Medical Recorder*.

Rheumatic Joints.

℞ Acidi salicylici } aa 3iiss;
Olei terebinthinæ }

Adipis lanæ }
 Adipis benzoinati }q. s. ad aa ℥iiss.
 M. Sig.: Apply locally to joints once or twice daily.—*Pouchet, in Le Progrès Médical.*

Styes.—Styes occur at all ages, but they are more common in children and young adults, and often appear in crops. As a rule, the patient is out of health, and suffers from constipation, acne spots, or errors of refraction, such as hypermetropia or hypermetropic astigmatism. Until suppuration actually occurs, hot boric acid fomentations should be used, and the patient should be purged. When suppuration has occurred, the eyelash, which is usually in the centre of the yellow area where the pus is pointing, should be pulled out, and then, if necessary, the swelling should be incised, and again hot boric acid fomentations applied. Syrupus ferri phosphatis, in drachm doses, should be given twice or three times daily after food. Calcium sulphide, in doses varying from $\frac{1}{8}$ to $\frac{1}{2}$ a grain for an adult, given twice daily, has been recommended in cases of recurrent styes. When the more acute inflammatory symptoms have disappeared, the following ointment may be prescribed:

R Unguenti hydrargyri oxidi flavi.....pt. j
 Petrolatipt. ij
 Ft. ung.

A small piece of the ointment to be applied to the margins of the eyelids with a fine camel hair brush night and morning. All errors of refraction must be corrected by the use of appropriate glasses. A generous diet, plenty of open-air exercise, and, if possible, a change of air are also indicated.—*The Practitioner*, March, 1907.

Current Medical Literature.

Extra-Uterine Pregnancy.—Dr. A. P. Heineck of Chicago, in closing the discussion on his paper, read at the State Society meeting, said:—While the vaginal route in cases of extrauterine pregnancy is becoming more and more unpopular, and deservedly so, it should not be entirely abandoned. Many practitioners employ both routes in the same individual, in cases in which either the abdominal route or the vaginal route alone are insufficient. The abdominal route commends itself to me for the following reasons: It enables one—1. To attend to co-existing pathologic conditions at the same time that the ectopic gestation sac is removed. 2. To secure a more complete and more careful hemostasis, as the operative field is much better under control. 3. To arrest the hemorrhage with greater rapidity. 4. To better judge of the extent of damage to make a more direct examination, and thereby make a more accurate diagnosis. 5. To make a more conservative ablation of organs. 6. To get more quickly in contact with the condition, and to better and more completely remove the fetal sac and its contents. 7. To make use of the sense of sight, as well as of that of touch, when operating for these conditions. 8. In case a mistake in diagnosis has been made (having made use of the abdominal route), one has ready access to those conditions that simulate extrauterine pregnancy.

If the opposite tube be the seat of a pyosalpinx, of a hydrosalpinx, of a benign or malignant neoplasm, of an ectopic pregnancy, it is needless to say that we should remove it. If the opposite tube be the seat of pathological conditions sufficient to warrant its removal, its ablation in the presence of ectopic pregnancy is not contraindi-

cated, in fact is indicated. There are many able authorities who favor the opinion expressed by Dr. Beck that extrauterine pregnancy shows a tendency to recur, and that as a prophylactic measure, the unaffected tube should be removed. However, I am not able to convince myself that as a general rule such a procedure is not improper. There must not be very much delay in these cases. We must operate promptly. Every day of delay hazards the woman's life; it increases the vascularity of the placenta, the size of the ovum, and the difficulties incident to the partial or complete ablation of the product of conception. Every day of delay increases the risk of rupture of the gestation sac, and rupture may mean immediate death. We think that as soon as you have presumptive evidence of ectopic pregnancy, you have an operation of necessity. If the condition be not urgent, give the patient the benefit of all the refinements of modern aseptic and antiseptic operations, but in the presence of rupture you have an emergency operation; you must not delay. Every minute is precious. Do not trust to expectancy.

Influence of Mother's Health on the Unborn Child.—Dr. J. W. Ballantyne, president Edinburgh Obstetrical Society, says (*Journal American Medical Association*, April 27, 1907) that there are three epochs of a child's life during which the mother's influence is supreme. These three epochs he calls (1) antenatal, (2) lactational and (3) post-lactational.

The antenatal period is what concerns us here. The extent and character of this influence are to a large degree unknown to or unconsidered by many medical men. While the author does not affirm that a mother's mental and emotional state during pregnancy has no influence on her unborn child, yet he deplores the fact that scientific men have led away from the plain facts and ascertainable phenomena of the transplacental transmissions of maladies, predispositions and immunities of the consideration of such a will-o'-the-wisp as the effect of the mother's imagination. The influence of the maternal on the foetal organism during the nine months of pregnancy are considered, and the subject of heredity is a completely different matter. In considering the physiological relationship he says the foetal and maternal bloods do not mix, unless, indeed, a hæmorrhage into the placenta takes place, but the passage of fluid gases and even solids takes place from the blood of one to that of the other. This is what the doctor means by transplacental interchange. Poison, toxins, microbes and agglutinins may pass over from the one organism to the other. Why in one case these exceptional substances pass over and in another case do not we are not in a position to state. The easiest explanation is that of placental hæmorrhage and a breaking down of the tissue intervening between the two bloods.

It is an interesting question whether or not there is any other route by which materials may pass from the mother to the foetus or reversely. There is some evidence to show that in some instances, at least, there may be a circulation of the liquor amnii and that in this way substances may so pass.

Diseases communicated to the foetus from the mother are considered—e. g., smallpox or measles; then, again, foetal sepsis; and still again, typhoid. It must never be forgotten in dealing with foetal pathology that the placenta is one of

the foetal organs, and a very vital one, and that when it is attacked or injured the results to the unborn infant are very serious. Dr. Ballantyne sums up as follows:

1. All diseased conditions of the mother in pregnancy, whether due to microbes, toxins, toxic agencies or diatheses, are dangers to the foetus.

2. The fact that the foetus sometimes, perhaps often, escapes must be largely ascribed to the protective influence of the placenta.

3. The morbid influence may either force its way through the placental barrier and so reach the foetus and cause disease or by destroying the integrity of the placenta itself it may cause death of the foetus.

4. The laws that regulate the placental interchanges, normal as well as pathological, have not yet been discovered.

5. The great safeguard of the foetus, if the mother be diseased, is a healthy placenta which opposes the passage of germs and toxins and which is not itself liable to the attacks of these morbid agencies.

6. We do not yet know if there are any medicines which act, as it were, as placental tonics; perhaps potassium chlorate and mercury are of this nature, and possibly some of the organic extracts may be found to have this action.—*Medical Review of Reviews*.

Congenital Weakness.—P. Budin, in *Am. de Med. et Chir. Inf.* (March, 1907), describes the conditions necessary to bring up infants that are prematurely born, or that for hereditary reasons come into the world with an undeveloped physical system. The weight of such children is below normal, but there are many children small in weight that are perfectly developed, and able to digest food and live under ordinary conditions. These are not included in the bounds of this article. Only those are dealt with that have undeveloped internal organs. The lungs, liver and digestive organs do not functionate properly. Those born with a weight of less than 2000 grams generally die. Such infants have a skin that is soft and abnormally red; the vessels may be seen through the transparent derma. The children cry, but with a feeble, immature sound; their respiration is not complete, reaching into the bronchial tubes, but not to the alveoli. There is marked muscular weakness, and the child generally lies inert and is unable to make sucking motions sufficient to get enough milk from the mother's breast. The temperature is subnormal. If they become cooled beyond the normal temperature there comes on a condition of scleroma or hardening of the cellular tissues. Many of these children die from becoming too cool, while others succumb to digestive troubles, diarrhoea, and attacks of cyanosis. Out of 830 infants seen by the author at the Maternity, which were premature, only 40 per cent. were saved. One of the most important measures used to care for them was keeping the temperature of the surrounding atmosphere above normal. For this purpose the child should be wrapped in wadding under his clothing; should be kept in an incubator at a temperature of 28° to 30° C., and allowed freedom of movement. The author finds it better to raise the temperature gradually when the child is brought in cold. It should remain in the incubator about two weeks, but in some cases a much longer time is necessary. Every two hours it is removed for a few minutes to feed and change it. Feeding is most important, and mother's milk is

most necessary. It must not be given in too large amount and generally with a spoon. Too much will bring on diarrhoea. In case of cyanosis artificial respiration may be gently performed. Such children must be guarded against contagious diseases, since they take them easily.—*Amer. Journal of Obstetrics*.

Late Syphilis and Pregnancy.—F. Beringer and G. Peju, *Journal de Med. de Paris* (March, 1907), state that the most frequent cause of abortion is syphilis. It is also a cause of hypertrophy of the placenta, vicious insertions, hydramnios, visceral lesions causing the early death of the infant, and various malformations compatible with life. It has an especially marked action on tissues in process of formation, and its influence may be exerted on the organism of mother or child. Another factor in the causation of abortion is the long period during which it can exercise its ravages. In the beginning of syphilis its effects is much more marked in producing abortion than later, and as the length of time since its inception increases its effects are less. At the same time the authors can show a number of cases observed by themselves in which abortions occurred from five to twenty years after its beginning. It is their belief that four years of treatment are needed before it is likely that the disease will not have an effect on the duration of pregnancy. Pregnancy is a condition which is most sensitive to the virulence of the organism. Out of ninety cases observed by the authors there were fifty-seven abortions with macerated fetus, five premature births, six hydramnios cases, three syphilitic infants, ten deaths at an early age, and only seven living children. Syphilis of long duration exercises on pregnancy a marked effect and a lasting one. Its cure is rather apparent than real, and long after the appearance of the usual symptoms there is a special sensibility to interruption of pregnancy. The practical deductions from these considerations are that when pregnancy is interrupted the physician should seek for a history and marks of a previous syphilis, in the shape of pigmented scars, exostoses, and previous abortions. Treatment should be carried out for four years carefully. Syphilitics should be advised not to marry for several years, and every syphilitic patient should be submitted to a course of antisiphilitic treatment before and during every pregnancy.—*Amer. Journal of Obstetrics*.

Potassium Iodide in the Diagnosis and Treatment of Syphilis and Cancer.—Mikhailoff, in *Roussky Vrach*, Dec. 16, 1906, considers two practical problems: First, the use of potassium iodide for the rapid diagnosis of cancer from tertiary syphilis, and, second, the use of the same drug in the treatment of cancer of internal organs. The first question he solves by giving from one to three enemas, containing a drachm of potassium iodide, half a drachm of sodium carbonate, and about three ounces of water in each. These are preceded by a cleansing enema used an hour previously. If the temperature of the patient rises after the injection, he has cancer. In syphilis the temperature remains normal or becomes subnormal. Iodine poisoning is very rarely seen with this method. The second problem concerns the method and dose to be used in treating cancer with potassium iodide. The author notes that within the past five years he has been able to materially assist fifteen patients with cancer of the oesophagus by the use of potassium iodide.

These patients were aided in swallowing by this simple treatment after they had been told that they must be operated upon. The larger the tumors had been, the softer had been their structure, the more marked was the reaction to potassium iodide. The mode of administration was the same as in the diagnostic method just mentioned. It is possible that cancer can be treated with potassium iodide in the method indicated, and there is an analogy between the effect of this drug and of Koch's tuberculin in tuberculosis.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement, July, 1907.

The mid-year population of New Jersey for 1907 is estimated to be 2,222,285, and the total number of certificates of death received during the month ending July 15 was 2,609, showing a decrease from the previous month of 96, and also a decrease from the average of the preceding twelve months (2,910) of 301. The deaths under one year numbered 439; over one year and under five years, 207; sixty years and over, 743.

Infantile diarrhoea caused 65 deaths, an increase of 24 from the previous month, but 88 less than the number which occurred from this cause in the corresponding period in the previous year, and 119 less than the monthly average for the past twelve months. A decrease in deaths also occurred from typhoid fever (22), diphtheria (42), consumption (260) and pneumonia (190), and a slight increase occurred from scarlet fever (27), measles (21) and cerebro-spinal meningitis (36).

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending July 15, 1907, and also the number of deaths reported from certain selected diseases compared with the average for the previous twelve months. The latter is given in brackets:

Typhoid fever, 22 (35); measles, 21 (11); scarlet fever, 27 (15); whooping cough, 28 (28); diphtheria and croup, 42 (56); malarial fever, 3 (3); tuberculosis of lungs, 260 (307); tuberculosis of other organs, 47 (49); cancer, 110 (115); cerebro-spinal meningitis, 36 (26); diseases of nervous system, 362 (383); diseases of circulatory system, 322 (296); diseases of respiratory system (pneumonia and tuberculosis excepted), 119 (176); pneumonia, 190 (256); infantile diarrhoea, 65 (184); diseases of the digestive system (infantile diarrhoea excepted), 170 (188); Bright's disease, 208 (186); suicide, 34 (28); all other causes, 543 (653).

The number of deaths caused by measles is undoubtedly greater than the figures indicate, for many deaths from bronchitis, broncho-pneumonia, capillary bronchitis and pneumonia are in reality due to these affections only as sequellæ of measles, for these diseases frequently develop during an attack of measles. Except scarlet fever and diphtheria, measles is the most serious disease of childhood, and its after-effects upon those who recover are liable to be lasting, resulting in impaired vision, deafness and chronic respiratory affections, including pulmonary tuberculosis. Ninety-six per cent. of the deaths from measles in New Jersey occur in children under ten years of age. During the year 1905 the deaths of only five persons over thirty years of age were re-recorded as having been due to measles, whereas seventy-seven deaths from this affection occurred among children five years old and under.

The records of this State, and experience in all parts of this country and Europe, show that periodical outbreaks of this disease occur with much regularity, and no successful measures have thus far been devised to prevent these epidemics. The high infectiousness of measles for one or two days before the appearance of the eruption, before the parents suspect that the cough and coryza indicate the onset of any serious affection, and before a physician is called to see the patient, permits the spread of the disease, particularly in the beginning of each outbreak, and when notification reaches the local sanitary officer the opportunity to arrest the progress of the disease by isolation of the patient has passed. If parents would invariably consult a physician whenever a child is suddenly attacked with sneezing attended with more or less cough and red and watery eyes early diagnosis in measles would be possible, and the prevalence of the disease might be diminished, but until some measure shall be adopted which will give to health authorities immediate notice of the first symptoms of the disease, there will be no reason to expect cessation in the prevalence of this malady.

Food and Drugs.—During the month ending July 31, 1907, 564 samples were purchased for examination, under the direction of the State Board of Health, 24.6 per cent. were adulterated, of which milk is given at 25.5 per cent. and cream 8.8 per cent. below the standard.

Book Review.

GOLDEN RULES OF PEDIATRICS.—Aphorisms, Observations and Precepts on the Science and Art of Pediatrics: Giving Practical Rules for Diagnosis and Prognosis, The Essentials of Infant Feeding and the Principles of Scientific Treatment, by John Lahorsky, M. D., Chemical Professor of Pediatrics, Washington University Medical Department, St. Louis, Mo., etc. The C. V. Mosby Medical Book Co., St. Louis. 362 pages.

This is largely a volume of aphorisms, or so-called Golden Rules of diagnosis, prognosis, hygiene and infant feeding and of treatment, with a somewhat extensive formulary. It contains many excellent suggestions that will prove valuable to the young physician and to refresh the memory of the busy older practitioner. A brief examination of the volume, however, leads us to question the wisdom or accuracy of some of its statements, *e. g.*, "*Appendicitis is always a grave disease; eighty-five per cent. recover under medical treatment.*" * * * In children, even, operation on every case, as soon as the diagnosis has been made, does not alter the death rate very much." (The italics are ours—Editor). "Remember to tell parents that the given case of diphtheria will be well in four days if you have injected a good dose of antitoxin on the first day"; then, on the next page—"Do not fail to warn parents as to the possible occurrence of post-diphtheritic paralysis in all cases." These Golden Rules need careful consideration, and good judgment should be exercised in following them. The pure gold needs to be separated from the alloy in this, as in many other good medical books.

DEATHS.

We learn as we go to press of the deaths of Drs. John H. Banta, of Paterson, and Ellis P. Townsend, of Billings, Mont., formerly of Camden, N. J. We hope to receive obituary notices for the October JOURNAL.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 4. ORANGE, N. J., OCTBER, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

SYMPOSIUM ON DISEASES OF THE GALL BLADDER.*

Etiology and Pathology of Diseases of the Gall Bladder.

By Horace G. Norton, M. D.,
Trenton, N. J.

Cholecystitis, which is nearly as frequent as appendicitis, is more difficult to diagnose and less amenable to treatment than other surgical diseases. It is a very important subject. Cholecystitis is most frequently caused, it is thought, first, by microbic infection; second, possibly by toxins; third, by direct traumatism to the gall bladder. In the first group as septicæmia, pyæmia, influenza, pneumonia and typhoid fever. The second arises from diseases of the alimentary canal, including typhoid fever and dysentery.

Appendicitis is sometimes a focus for the spread of infection to the liver and gall bladder. It may be by direct extension from the duodenum, through the common and cystic ducts, or by the blood vessels, or by both simultaneously.

In general blood infection, the microorganisms may be excreted into the bile ducts or gall bladder from the hepatic artery and portal vein. That cholecystitis does arise from typhoid infection is proved by the finding of typhoid and colon bacilli in the gall bladder. Probably slight cholecystitis frequently occurs in typhoid, but is masked by the graver condition and unless jaundice occurs is usually overlooked.

Cholecystitis caused by typhoid infection is said to occur years after the infection, proved by the presence of typhoid bacilli. Cholecystitis is usually present at this time; possibly the presence of gall stones and irritation induced by them may be necessary to cause a cholecystitis from the invasion of the gall bladder with typhoid bacilli. Typhoid bacilli in the blood cannot pass through normal hepatic tissue; it probably requires that the hepatic tissue and walls of the portal veins should be damaged by the toxins incident to an attack of typhoid or other disease before they can infect the bile duct or gall bladder. I once saw a very severe, acute cholecystitis with jaundice follow operation for a fulminating appendicitis in a child. This case came near ending fatally, after the onset of the jaundice. There was no evidence of co-existing cholecystitis. The presence of gall stones in cases of appendicitis is, I think, usually an accidental coincidence, the attack of cholecystitis causing the gall stones surely long preceding the latest attack of appendicitis with appendical disease. I have never seen a well marked case of typhoid cholecystitis but it does occur as a complication.

The irritation of previous cholelithiasis may be the factor needed to produce cholecystitis as a complication of typhoid, acting either by obstructing the duct and causing distension or by ulceration of the mucous membrane from pressure offering an avenue of infection. In cholecystitis we find typhoid and colon bacilli, streptococci, staphylococci and pneumococci, seeming to indicate that any of these microorganisms can cause infection of the gall bladder. It has been stated that typhoid infection has occurred eighteen years after the attack of typhoid fever.

*Read at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

More than one variety of germ has been found at the same time in the viscus. It may be taken for granted that if we have a distended gall bladder infected by germs of any kind, cholecystitis will follow. Suppurative cholecystitis is due to a further development of the causes of acute cholecystitis; *e. g.*, infected calculi, or microbe infection. Cancer of the gall bladder, either primary or as an extension from the liver, is of considerable importance and fairly frequent among visceral forms of cancer.

The presence of gall stones in the gall bladder is probably a frequent causative factor of cancer, but gall stones are frequently present for years in cases in which no cancer develops. In my histories of gall stones I can find seven cases of long standing in which no cancer has developed. Primary cancer does occur without the presence of gall stones in about 20 per cent. of cases. May not the irritation of gall stones in the gall bladder of one predisposed to cancer, *i. e.*, having a cancerous family history, cause cancer of the liver, which, had it not occurred in this way, might have developed elsewhere? I have treated a case of cancer of gall bladder and liver in a woman aged fifty whose mother died of cancer of the womb. Analogous to irritation of gall bladder as a factor in causing cancer is the greatest frequency of uterine and mammary cancer in multipara.

Morbid anatomy, gall bladder enlarged, or sometimes in old recurrent cases shriveled and contracted, often adherent to parts around it, wall of gall bladder swollen and softened, often there is ulceration near the fundus due to irritation of calculi. The mucous membrane lining the cystic duct is sometimes so swollen as to be closed.

THE DIAGNOSIS OF GALL STONE DISEASE.*

By Philander A. Harris, M. D.,
Paterson, N. J.

The twenty minutes of time at my disposal is inadequate for me to review all of the important symptoms of gall stone disease, and the little that I am thus able to say is addressed to general practitioners of medicine rather than to experts in hepatic disease.

One of the first duties of the physician when called to a patient with pain in her

body is to locate the seat of pain. The physician who does not uncover the body of his patient, and thus determine and fix in his mind the exact anatomical point or region from which the complaint of the patient emanates, and who is simply satisfied with having the patient *tell* him where pain or tenderness is, will have comparatively little success in diagnosing gall stone disease. While the abdomen is exposed he should bring to his aid all that can be derived from inspection, palpation and percussion.

Thousands of autopsies were formerly performed in the interest of science by pathologists well trained in the art of post-mortem examinations and, for their time, also well versed in microscopic study. The knowledge of visceral disease thus gained, plus the clinical history of the patients, formed the basis for all estimations. It may be said that after many years of work thus prosecuted, advancement remained almost at a standstill until the visceral cavities were, in the course of disease, invaded by the knife of the surgeon. Mural incisions, and examinations there-through, exposed both the normal and the pathologic anatomy of the viscera to view, and at once began to afford knowledge which could not otherwise have been obtained.

The thoracic, the pelvic, the abdominal, and cranial cavities, and later, additional, and particular regions of these visceral cavities, were more or less invaded by the knife of the surgeon. By such means facts have been secured to either substantiate or disprove former theories. The very great progress which has been made in the understanding of the symptomatology, etiology, pathology and cure of visceral disease, distinctly dates from the frequent invasion of such cavities by the knife of the surgeon.

The late Hans Kehr in alluding to the knowledge so recently gained through the knives of hepatic surgeons, tersely expresses the idea by referring to the operations performed upon the gall bladder in recent years as "autopsies in-vivo," and distinctly says that to operations in life are we mainly indebted for a better understanding of the cause, the symptomatology, the pathology and the cure of gall stone disease. "Autopsies in-vivo" have doubtless been of no less value to the interests of other visceral cavities, or regions thereof.

Gall stone surgery and its lessons are yet so new, that the profession is still suffering from fallacious teaching, and a still sadder fact is realized when one opens, as he may do, a new book on diagnosis just from the

* Read at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

press, and finds that certain paragraphs therein bear the impress of having been written twenty years ago, in what I hope I may be pardoned for terming the standstill era of gall bladder pathology.

The past vagaries of clinical medicine have probably in no instance been more appreciably exemplified than in the growth of the differential diagnosis of diseases in the upper part of the abdomen. Improvement in the diagnosis of diseases in the upper abdomen is the direct result of operations performed for their cure, in the few years that surgeons have so frequently and more deeply invaded the upper abdomen of the living.

Moynihan states "that in all cases of cholecystitis it is the inflammation which the stones arouse rather than the stones themselves which is responsible for the production of the chief symptoms." Hans Kehr held similar views regarding the roll played by infection and inflammation, and these views appear to have gained acceptance by others experienced in gall stone surgery.

COLICS.

A stone arrested in the common duct in such manner as to completely dam the bile stream causes pain, and often colics. In such instances the ducts and the gall bladder are for a time overdistended from retention of bile, and a physical possibility is exemplified, but it would be a physical impossibility for nature to overdistend the gall bladder with bile so long as the bile stream flows into the intestine without interruption. If, however, the neck of the gall bladder becomes entirely choked and the cysticus inflamed, the inflammatory exudation distends the gall bladder and pain is probably produced.

The commonest diagnostic symptom of gall stone disease is colics. While one may meet with cases of advanced gall stone disease in which colics have not occurred, such cases are quite exceptional. Very severe pains occurring in the upper abdomen with little or no premonition, lasting a few minutes, half an hour, an hour, or possibly several hours, in which the pain disappears as quickly as it came, not to appear again for days, weeks, months, or possibly years, constitutes a complaint which should always cause us to think of gall stones.

Many suppose and teach that the pain of gall stone colic always centers over the gall bladder. It generally does, but quite often it centers in the median line of the epigastric region, and occasionally it centers to the left of the median line. Certain compilatory writers differentiate the excruciating colic

of gall stone disease, and alleged gastralgia, according to whether the pain of the colic centers much to the right of the median line, or at the median line of the body. No one who carefully takes the history of fifty cases of gall stone disease, and then with his knife opens the abdomen to find and remove pathology, will accept the statement that gall stone disease is only found where the centralization of pain in colics occurs only to the right of the median line. Any surgeon who well takes the histories of a large number of cases of gall stone disease and afterwards operates upon them will tell you that centralization of pain in the colics is often exactly in the median line, between the ensiform cartilage and the umbilicus.

Dr. Christopher Graham (of the Mayo Bros.) in his paper, entitled "Gall Stone Disease," writes as follows:—

"Were neuralgias of the stomach, gastralgias, cardialgias, and acute indigestion, forever buried, there would be made better diagnoses, and a greater number of relieved and rejuvenated patients to rejoice over the graves of these buried bugbears. Gastralgia, neuralgia of the stomach and the like may occur as independent realities, yet if they do not always, they usually have as a cause some lesion as cicatrix, ulcer, cancer, hypersecretion, or a constitutional disorder with a reasonable history leading directly to such lesion. In our clinic more than 90 per cent. of so-called neuralgias of the stomach (where there are few symptoms save sudden pain and occasional vomiting) prove to be gall bladder trouble, the remaining small number will be chiefly of duodenal or appendiceal origin. When called upon to interpret pain of the upper abdomen, we have to hold in mind, first of all, lesions of the gall bladder; second, ulcer and cancer of the stomach and duodenum; third, appendicitis; fourth, kidney stone or tuberculosis, and fifth, pancreatitis, the diagnosis of which still seems surrounded by the mists of uncertainty. Exclude ulcer and cancer of the duodenum and pyloric end of the stomach and the major part is accomplished. After eliminating appendicitis and nephrolithiasis, the field is indeed narrowed. Gall stones and pleurisies are occasionally confounded, a fact not to be lost sight of. Gall stone trouble may simulate ulcer or cancer of the stomach and defy differentiation. Duodenal ulcer may just as surely be taken for gall stones, while appendicitis at times may humiliate the most prudent, but usually a careful history will develop a train of symptoms which in the great majority of

instances enables one to make a practical diagnosis, if not always an exact one."

If any physician will take from his shelves a work on medical diagnosis or almost any medical book in which the word *gastralgia* appears in the index he will usually find in that book under the title of *gastralgia* a good description of a gall stone colic with sometimes absurd reasons for the differentiation of these two diseases, if two there be. One author on general diagnosis speaks of gall stone disease associated with sympathetic *gastralgia*. What he may mean by this, I know not. Have not the so-called autopsies in-vivo of Kehr, Robson, Mayo and many others, by their finding of the real pathology of the gall passages, stomach and intestines shown that the term "*gastralgia*" has proven to be a very misleading misnomer?

While gall stone colic (particularly the first colics of the patient) is rather more apt to occur at night, my histories show a number of cases in which the patient was never awakened from sleep with a colic. Possibly the average duration of a gall stone colic is half an hour. It often lasts but ten or fifteen minutes, occasionally an hour or several hours. In moderately severe colics, patients are apt to assume a variety of postures. Whatever the position, the body is generally more or less flexed. Thus, while the colic continues, whether the patient stands, sits, or walks, she bends the body forward. The patient often presses the region of pain with her arms or rubs it with her hands. In a very severe colic patients occasionally assume upon the floor the knee-chest position and maintain it until the doctor arrives or until the severer stage of the colic terminates.

During the colic pain often radiates to the right shoulder blade, sometimes to the left, sometimes to both shoulders, or across the back to the inferior angles of both shoulder blades. In one case the only radiation of the pain was to the middle of the sternum. During a colic, however, large areas of the abdomen or body may also be painful. Gall stone colics almost always recur. The interval of time between the recurrences may be a day, a week, several weeks, or months, a year, or years.

Pains soon after eating, sometimes before the meal is finished, often regardless of the kind of food taken, if attended with vomiting, should suggest gastric ulcer. In well established cases of gastric ulcer blood is vomited, but in some instances of gastric ulcer blood may not for a long time appear

in the ejected material. The pains or the colics of gall stone disease are never so frequent as the pains due to gastric or duodenal ulcer or to an arrest of the food stream in the stomach from any cause. Gall stone colic never bears so close a relation to the ingestion of food, as do the pains of gastric ulcer, and possibly cancer of the stomach.

Clinically, *cholecystitis* and *cholangitis* and partial or complete closure of the *choledochus* are very often attended with *dyspepsia* and the diagnosis rests upon the more important clinical history as colics, tenderness over the gall bladder and later and very often jaundice. Cancer of the stomach is often well advanced before either pain or indigestion is particularly complained of. Cancer rarely produces excruciating pain. Gall stone colics in which the pain centralizes far to the right of the median line may call for differentiation of it and renal colic. The radiations of renal colic are of course generally outward along the ureter to the bladder, urethra, glans-penis, and inside of the thigh or testicle, and are usually attended with alterations in the urine or the voiding of it.

STEADY PAIN AND TENDERNESS.

More or less steady pain often continues after the subsidence of colic. It may last for hours, or a day, or several days, and be so distressing as to require opiates for the patient's relief and is often so severe or constant as to prevent the patient going about during its continuance. If, immediately after the disappearance of a severe gall stone colic, pressure is made over the gall bladder, while the patient breathes well outward, and at the same time is told to disengage as far as possible the abdominal muscles, greater tenderness will be evinced at that point than at any other. Tenderness under pressure may entirely disappear in a few hours after a colic, while in other instances it may persist for a day or several days without the recurrence of another colic. The degree of tenderness under pressure and its duration, is not always in regular proportion to the amount of pathology present. Those who frequently operate for the cure of gall stone disease well know that very great pathological changes are at times observed at operation upon patients who have had but few or slight colics, and who may also have been but slightly ill.

The location of steady pain or tenderness in the gall bladder region following a colic is a most valuable aid in the diagnosis of gall stone disease, and is of special diagnostic value in a considerable percentage of

cases wherein the centralization of pain during colic is in the median line, or to the left of it.

JAUNDICE.

So long as the inflammation and pathology are limited to the gall bladder jaundice does not appear. Hepatic surgeons of extensive experience assert that only one-half to three-fifths of the cases operated upon show that the pathology has extended beyond the gall bladder. When the choledochus becomes plugged with a stone, or with inflammation, the bile stream is arrested, and jaundice results. Whether the appearance of jaundice precedes, attends, or follows a colic, it is presumptive evidence of gall stone disease.

The absence of jaundice in connection with a colic should never disprove a diagnosis of gall stone disease. The late Hans Kehr, after performing 480 operations for gall stone disease, made the statement that jaundice had not presented in 80 per cent. of all cases operated upon. If the statements of Kehr and others who have arrived at somewhat similar conclusions are correct, of what value are the statements of compilatory writers on diagnosis, that the absence of jaundice in connection with a colic centralizing in the epigastric region, practically excludes the liver as standing in a causative relation unless gall stones are found in the stools after the colic?

In this relation let me say that the test of finding or not finding gall stones in the stools, however promptly inaugurated after the colic, and however rigidly or persistently followed, is only of restricted value, whether gall stones be discovered or not. The screening of stools and the finding of gall stones therewith is interesting, and the knowledge thus gained may in some possible way be made of value to the patient, but just how much advantage the patient or her physician may derive from it I know not. If we find stones in the fæces we know not how many may remain in the gall bladder or ducts. If we do not find stones in the fæces it is no proof that stones do not exist in the gall bladder or gall passages. How often does the surgeon find many stones in the diseased gall bladder very much larger than the lumen of its neck, or larger than the ducts between it and the intestine.

There are, no doubt, many patients who carry for a long term of years, or possibly for the major part of their lives, in the gall bladder, and possibly also for a considerable time in the common duct, stones which cause pain or illness with or without jaun-

dice, and during all this time not a single stone may have passed into the intestine. The appearance of jaundice without distinct colics or pains should not be taken as diagnostic of gall stone disease without a most careful study of the history and symptoms presented. If one studies the non-calculous diseases of the liver he will find that there are a lot of pathological conditions which cause jaundice. The occurrence of jaundice with little or no pain, and the development of ascites would point to cirrhosis rather than to gall stone disease. In general it may be said that in connection with colics tenderness of the gall bladder under palpation constitutes a most important symptom of gall stone disease.

As hitherto intimated, while the pathology is limited to the gall bladder, jaundice does not occur, but when the inflammation invades the common or liver ducts, jaundice is often produced. Jaundice fades after a subsidence of the local obstruction and inflammation of the common duct, and it returns or increases with each rekindling of the pathology. When bile no longer pours into the intestine, or, reaches it in but small quantities, the stools become light in color, sometimes referred to as putty colored, and the urine becomes dark and gives a decided reaction for bile.

Steady pain and colics of less intensity are apt to characterize obstruction of the common duct. The effects upon the liver of common duct obstruction continued for longer time are noticed in enlargement of the organ and marked distention of the biliary ducts.

I now have under observation a patient presenting a definite and clear history, first of gall stone colics extending over two or three years, and of late, the symptoms of an obstructed common duct with enlargement of the liver. This patient not wishing to accept operation, consulted a very eminent internist, who has held the patient under treatment for a month or so for enlargement of the liver. Within the past five days this patient has had two distinct and very severe colics and the gall bladder became exquisitely tender under pressure. She very quickly became deeply jaundiced, with itching of the skin from head to foot, and is again under the care of the physician who sent her to me six weeks or so ago. The husband of the patient has this day seen me with reference to having her operated upon and if operation is reached, I have no doubt that we shall find that she is suffering purely from gall stone disease, and that the en-

largement of her liver is simply due to the obstruction of the common duct.

In exceptional cases the bladder may be much larger than normal, generally it is smaller, and its walls thickened. If the bladder is very much larger than normal and the patient gives a history of a gradually increasing and deepening jaundice with no relief from the icterus, cancer may be suspected. Gall stones not infrequently infect local areas, the ulcer dipping deeply enough to penetrate the walls of the cysticus, its neck, or the common duct, causing local abscess, general peritonitis, or possibly a local inflammation with encystment of a calculus, or of calculi. At operation I have found all these conditions exemplified.

I append rather full histories of a few cases exemplifying different forms and stages of the disease. I also wish to submit the gall stones removed from about two dozen patients for whatever interest may attach in this relation. I also wish to submit a few gall bladders of special interest removed from patients.

CASE I.

Mrs. I. L. Aet. 42. In fair health, her main complaint being attacks of severe colic from which she has suffered for twenty years. At first these colics, which have always been referred to the epigastrium, occurred every few weeks, or every few months, but for the past two or three years they have recurred with greater frequency, so that now she not only has them almost every week, but often two or three in a week. She generally vomits when the pains come. She has also suffered a great deal with headaches. Diagnosis, cholelithiasis.

Patient operated upon May 10, 1902. Gall bladder only slightly distended, its walls a good deal thickened. Incised gall bladder, removed two large and nine small stones. Gall bladder filled with a slightly viscid and yellow fluid. Cystic duct found pervious, although rather tightly plugged by one of the large stones which was difficult to remove. The gall bladder was sewed to the peritoneum and the incision closed around a drainage tube. Bile poured from the drainage tube and wound for about three weeks, after which the wound closed and patient left the hospital.

Four weeks after leaving hospital she had a slight colic and for about six months she occasionally had a little pain in that region. After that time and until the present she made no complaint of colics or pain. It should be said that this patient gave no history whatever of jaundice. At this time,

five years after operation, she remains perfectly well excepting that she at times suffers rather severely with headaches.

CASE 2.

Mrs. D. Nap. Referred by Dr. Hiram Williams May 31, 1905. Aet. 34. Married seventeen years; four children. Two years ago the patient was awakened from sleep at two in the morning with severe pain extending from a point slightly to the right of the sternum to the umbilicus. This pain ran from this region to both shoulders. This first colic lasted for one hour and was followed by a good deal of soreness which lasted for a day or so. She vomited with this first colic but not until after she had taken some brandy. Two or three months after this she was awakened at two in the morning with another and even more severe colic than her first one. In this attack she assumed various positions as sitting up, standing, leaning forward, etc. She immediately sent for her physician but finding that he was not at home she was given a drink of whiskey, and vomited after taking it. There was soreness across the epigastrium for a short time after this attack. In the last twenty-one months she has had ten or twelve colics, all of which came in the night excepting the last one, which occurred on May 27th, at two in the afternoon. The pain attending the last two colics has been more severe and prolonged than in any of the previous colics. Her last colic continued hours and until relieved by a considerable amount of morphia.

Operated upon June 6, 1905. Gall bladder distended. Its walls more grayish in color than normal. The peritoneum of the fundus was incised, and the muscular and mucous coats of the gall bladder were enucleated en-masse. The gall bladder contained two large and three small stones. One other calculus with mulberry surface was encysted in the tissues just outside of the neck of the gall bladder. This mulberry stone, of course, had ulcerated through the neck of the gall bladder in connection with one or other of her attacks, and was simply resting in the tissues which surrounded it. The two large calculi when wet have a beautiful brownish color. A drainage tube 7-16 inch in diameter was sewed with catgut to the stump of the cystic neck. The peritoneum covering the gall bladder was drawn up and sewed neatly around the tube at a point where it merged from the abdominal incision. Before closing the abdominal incision the region about was sponged with a solution of one to one-thousand formalin.

One month after operation the patient visited my office in perfect health, with an increase in weight, and she has had no complaint referable to the epigastric or gall bladder region since she was operated upon. She now weighs twenty-five pounds more than when operated upon.

CASE 3.

Mrs. M. W. Referred by Dr. J. A. Mac-lay, December 23, 1905. Aet. 37. Married fourteen years; three children, several abortions. Last pregnancy five years ago.

General health good excepting attacks of pain. Five years ago at 4 o'clock in the afternoon was taken with severe pain in the median line three inches below the ensiform. Pain lasted about half an hour. She did not go to bed but sat in a chair and leaned sharply over a table until the severe pain passed off. From that time she had an attack about every six months, colics continuing from half to three quarters of an hour. Each succeeding one appeared rather more severe than any before it. Since July, 1905, she has had frequent attacks of colic at night, the centralization of pain being about three or four inches below the ensiform cartilage in the median line. At no time did she experience any soreness after the colics excepting with the last one, when she continued very sore for about half a day. During this attack one-fourth grain of morphia was given without apparent relief. With all the colics pains shoot through the lower dorsal region branching out to both shoulder blades. In all the colics she either sits upon a chair and leans sharply forward, or walks the floor sharply bending her body. The patient has lost twenty or thirty pounds within the past few months, although she is still rather stout, and her abdomen is covered with a thick layer of adipose. It is not known whether fever attended or followed any of her colics. No complaint of digestion.

Patient entered Paterson General Hospital. Was operated upon by six inch incision. Intestines were adherent to gall bladder, requiring several ligatures while severing them. Gall bladder normal in size, although distended and containing many calculi. No stones discoverable in the common or hepatic ducts. Exsected the gall bladder, ligated the neck, and disinfected the stump. Closed without drainage. Bladder contained very little bile. Stones were interwoven with a mass of coagulated fibrin. Bladder contained no pus. Patient made a quick recovery and continues well.

CASE 4.

Mrs. S. Referred by Dr. John Walters, Wharton, N. J., December, 1903. Aet. 42. Has had nine children. Youngest one year and a half old. For many years she has been troubled very much with a tendency to diarrhea and "cramps in her stomach." By her stomach I found that she meant just beneath the ensiform cartilage. The colics were no more to one side of the median line than the other. These cramps occurred once in a fortnight, once in one, two, three, four, five or six months, "according to what she had eaten just before the colics." The patient said that "chocolate cake, or pickles gave her cramps." Her cramps always occurred at night. Says that she was usually yellow for days before the colics appeared, and that the colics were always accompanied by vomiting. The discharges from the bowels were always brownish. So much of this patient's history brings us to July, 1903.

She was then taken with severe pain in the right hypochondriac region. She at once became very sore across her, the abdomen "swelled up" and she was in bed for six weeks, during all of which time she "was awfully yellow." She then began to go about, her skin slowly returned to its normal color which she insists "was always very sallow" and she was free from colics until October 15th, when she was again taken with a severe pain in the right hypochondriac region. After this, slight colics frequently recurred, but her suffering was more due to steady pain and an uncomfortable feeling in right hypochondriac region. She was slightly emaciated, and her diet had become much restricted. Diagnosis, gall stone disease.

Abdominal section performed on December 3, 1903. Gall bladder distended, slightly larger than the average gall bladder, its walls were very much thickened. Fundus of cysticus incised and I removed there-through four ounces of almost colorless and slightly viscid secretion and a few gall stones. One of the larger stones rested in the cystic duct. Stones were also found in the common duct. I enucleated the gall bladder to its junction with the common duct at which point I extended the dissection sufficiently to introduce the finger into the common and liver ducts, from which I removed five or six stones. Two of the calculi were fractured in their removal. All the stones found were removed. A drainage tube was placed from the common duct through the incision, and the abdominal wall re-united around the drainage. After the operation

the patient carried a practically normal pulse, temperature and respiration. From a few days after the operation onward, the patient could eat any kind of food without the slightest pain or discomfort. Bile flowed quite freely from the drainage tube which was removed in eight days. The quantity of bile escaping continued about the same for ten or twelve days. After that time it rather rapidly diminished in quantity so that twenty days after operation, when she left the hospital, the wound had so far closed that only a few drops of bile soiled the dressings. This biliary fistula entirely closed shortly after leaving the hospital.

This patient when seen about two months after leaving the hospital, assured me that she had had neither pain nor colics, that she had eaten of anything placed upon the table for which she cared, and that she had not suffered from dyspepsia, or any other uncomfortable feeling in the epigastric or hypochondriac regions. At the time of this writing the patient remains well.

CASE 5.

Mrs. J. H. Referred by Dr. Kice, Whar-ton, N. J., March 21, 1905. Aet. 49. Married twenty-nine years; two children; no abortions. Bowels habitually constipated. Takes laxatives. Many articles of food disagree with her, and within the last year her bill-of-fare has become restricted to a very few articles of diet. Patient says that most items of food "give her a heavy pain in the stomach and cause her to bloat." In former years she had pain in her stomach immediately after eating, but she makes no complaint of that now. It is simply a heavy feeling, and a bloating in the epigastrium.

Nineteen years ago she had the first colic of the character which was afterwards diagnosed as hepatic colic. At times she has had two or three attacks in twenty-four hours, at other times a week elapsed between her colics and at times three or four weeks would occur between colics. At no time within the last eight or nine years has she gone longer than a month without a colic in the epigastrium. She has had five or six severe attacks in the last nine months and a good many slighter colics. When the colics are severe the patient bends forward and rubs with her hand over the region of the gall bladder. The patient never vomits with her pains. She often has pain under the right shoulder blade while the colic is present. She never had pain under the left shoulder blade. Patient is not sure that she was never jaundiced until three weeks ago.

It should be said that with her severe colics she always had "cold shiverings" and for days or even weeks following a very severe colic there was an area of tenderness in the epigastric and gall bladder regions. The patient is now slightly jaundiced. Her stools are clay colored and pasty since the last attack of jaundice. She also has had a good deal of itching of skin since the last colic. Urine is dark in color. Patient says she has not lost any flesh, although she is rather thin.

Patient operated upon March 31, 1905. Six inch incision; gall bladder small and of grayish color and its walls a great deal thickened. The neck of the gall bladder was large enough to admit my little finger. The common duct was so enlarged as to readily admit my finger. At the ampulla of Vater there was a stone about three-fourths of an inch long and one-half an inch thick, which was greenish at one end and yellowish gray for about two-thirds of its other surface. I succeeded in dislodging this stone from its imbedment, and removed it through an incision in the greatly dilated choledochus. I also excised the gall bladder. The common duct was closed with catgut. Drainage tube placed from the cystic and common duct through the skin. Its lumen filled with to and fro gauze. The abdominal incision was closed with catgut. Bile escaped from the drainage tube before the operation was completed.

This patient made a prompt and complete recovery. I visited her about a year and a half later. At that time she had gained twenty or twenty-five pounds, appeared to be in perfect health, and had had no jaundice, colics, or other symptoms referable to the epigastrium or gall bladder region.

CASE 6.

Mrs. R. Referred by Dr. Chas. B. Smith. Aet. 50. Her first colics began at the age of forty when she occasionally had severe pain attributed to indigestion. Her second colic occurred two years after the first, the third colic one year after the second, and afterward they recurred about once a year until October 6, 1905. With every colic the patient vomited and was then relieved whether medicine had been given or not. Dr. Smith's introduction to the case began with a severe colic which occurred in the night of October 6th. The severe pain which centralized in the epigastrium lasted all night; the abdomen became somewhat tympanitic, and jaundice occurred for the first. This patient does not recall having any pain under the right shoulder blade

until October 6th. The radiations of pain previous to that time were to the left shoulder blade. The centralization of pain in the colics was over the gall bladder. In the attack of October 6th the pains ran to the neck and she had a great deal of soreness all over the upper abdomen. The patient says that soreness across the abdomen had attended other attacks but it had never been so pronounced as now.

This patient had suffered from indigestion and had vomited easily for a number of years. Before the birth of two of her children she vomited blood. The patient says that the most distressing part of her dyspepsia was vomiting rather than pain. This patient had several attacks of colic between the 6th and 10th of October. Her highest temperature was 102 degrees, and she was not able to go about until about the 20th of October. The next series of colics, pain, and soreness began on November 28th. On the 4th day after this series of colics, pain, etc., her temperature reached 104 $\frac{3}{5}$ degrees, she was extremely jaundiced, abdomen tympanitic, very tender over the gall bladder and nauseated so that she could take but little food or drink and did not get up from her illness for about twelve days. The third attack began Friday, December 22d, with a colic very early in the morning. Her temperature at 9.30 was 99 degrees, at 4.30 102 $\frac{2}{5}$ degrees. On the day following her temperature was about 102 degrees and at 10 P. M. 103 $\frac{3}{5}$ degrees. On Sunday the temperature lowered to 101 degrees, on Monday 100 degrees, on Tuesday 98 degrees, with a pulse of 96 degrees.

This patient was admitted to the Paterson General Hospital December 30, 1904, with two or three degrees of elevation of fever. The patient was still very deeply jaundiced, and able to take but little nourishment. She was operated upon January 6, 1905. The gall bladder was almost entirely covered with the adherence of omentum and intestines. The portion of the gall bladder where there were no adhesions was of a pale gray color, its walls much thickened and so fragile that in separating the adhesions and other viscera, calculi escaped from it at three or four points. The bladder, which was removed, contained about 100 stones. The cystic duct was amputated just above its entrance to the common duct. After removal of the gall bladder a stone dropped into the common duct and was readily passed through into the intestine. A rubber drainage tube was sewed with catgut in the stump of the cystic neck of the gall

bladder, wrapped with gauze and rubber film. The patient's pulse being above 140 degrees and rather weak at the conclusion of operation, I injected two quarts of normal salt solution into the left median basilic vein. This lowered the pulse and improved its quality. The patient was returned to her room in good condition. She left the hospital in about one month, gained her health and about 40 pounds of flesh and has not since had any jaundice, colic, or symptoms referable to the gall bladder.

CASE 7.

Mrs. Tic. Referred by Dr. Shippee February 5, 1907, with a diagnosis of gall stone disease. Aet. 39. Married thirteen years; three children.

This patient says before the birth of her first child ten years ago she was jaundiced for a month or two but did not have colics or pain. She has had a few attacks of soreness in the region of the gall bladder in the past few years and some rather severe pains. At times she could not stand erect on account of the pain, and had to lean forward in walking. She has also had attacks of soreness in the region of the gall bladder not accompanied by any severe pain or colics. Two weeks before the birth of her last child, or in July, 1905, she had moderately severe colics centralizing in the epigastrium. She had two or three seizures of this kind before her child was born. Sometimes the pain first appeared at the inferior angles of both shoulder blades, and radiated from there to the epigastrium. This pain, which radiated from the shoulder blade to her stomach, was not any worse anteriorly on one side than the other. In these particular attacks preceding the birth of her last child, she did not have any particular soreness over the gall bladder, and the colics rarely lasted more than half an hour. One of these attacks, occurring before the birth of her child in August, 1905, awakened her in the night from sleep. She had jaundice at that time. She had a great deal of pain in the region of the stomach and gall bladder during the delivery of her child.

Her most severe colic awakening her from sleep at night occurred two weeks after the birth of her child in August, 1905. The pain was in the region of the gall bladder and lasted an hour or two. She took doses of codein and morphine. No special soreness followed this colic. Did not vomit with it, nor was she jaundiced. She had one or two less severe colics after which no more occurred until October, when she had another severe colic. In the winter of 1905,

and 1906 she had a number of colics which generally either came in the evening or awakened her from sleep at night. On one occasion only during that winter does she remember having had a great deal of soreness following a colic. At that time she was unable to be upon her feet for a week or more. She was also then somewhat jaundiced. She also had a good deal of pain "across her back just beneath the shoulder blades." When the colics in the epigastrium were very severe the pain ran all the way up and down her back. In the attacks during winters of 1905-1906 she frequently took morphia to relieve the pain. The last attack of that season occurred on March 1, 1906. From that time she had neither colics, jaundice, nor any severe pain in the regions of stomach or gall bladder and did not take any opiates for about ten months, or until January 14, 1907. Although she thus did not have any colics she sometimes had a little pain across the back beneath the inferior angles of the scapulæ of the same character she had been accustomed to have with the colics in the epigastric region.

On January 14th she perceived a slight soreness in the region of the gall bladder. On January 15th she had quite a severe colic, and remained in bed the next day. On the following two or three days she was out of bed. On Friday night, January 18th, she had another severe colic and on Sunday, the 20th, she had another one. A great deal of soreness attended and followed these colics. When Dr. Shippee saw her on January 18th he gave her morphia for the relief of the pain but so much soreness attended and followed these colics that she remained in bed for one week and on January 28th she had another severe colic again awakening her from sleep. Pain extremely severe and spasms recurred frequently. On January 21st or 22d she became slightly jaundiced. On February 1st she was taken with a very excruciating pain which lasted but a few minutes. She has since had some of these cutting, piercing pains. After these attacks the patient had some rise of temperature, highest discovered 101 degrees F., however her physician was only able to record her temperature once in each twenty-four hours.

This patient arrived at the Paterson General Hospital on February 4, 1907. She had a rather severe colic after reaching the hospital, from which relief was not obtained until three doses of morphia were given. I had the nurse outline with iodine on the skin the region of greatest pain. The

center of this region was two inches below the costal cartilage, and one and one-half inches to the right of the median line. The pain "ran all the way around to her back." It also radiated out over the abdomen. Her temperature was 100 $\frac{1}{2}$ degrees. Slightly jaundiced. Good deal of tenderness under pressure in right hypochondrium. Patient sits up in bed since her arrival at the hospital, asserting that she is more comfortable in that than any other position. Sleeps, resting upon a back rest at an angle of 45 degrees from horizontal. She informs me that the evacuations from the bowels during the past week were grayish in color. Urine is highly colored, and contains a great deal of bile pigment. The red cells were 4,560,000. Leucocytes 23,680. Hæmoglobin 60 per cent.

On February 11th patient cannot yet lie down. Has had very little pain in last two days. A blood count gave the following result: Red cells 4,644,000, leucocytes 18,400, hæmoglobin 60 per cent. On February 23d the patient continued somewhat jaundiced. Feels that she is unable to lie down. She has tenderness over the gall bladder but no pain excepting under pressure. The following report was made upon her blood: Red cell count about the same as in the two previous examinations, leucocytes 9,000.

She was then subjected to operation. The gall bladder was yellowish in color, about normal in size, its walls were twice as thick as normal. After breaking up some adhesions I succeeded in bringing the gall bladder to view. I made an incision in the fundus, found the gall bladder contained a little bile and rather viscid mucus and three very small dark brown stones. As no stones could be felt in the hepatic ducts or choledochus, the neck of the gall bladder was ligated with catgut, the gall bladder exsected and the abdominal incision closed without drainage. The patient was placed in bed at an angle of 45 degrees from the horizontal and was kept in that position for three or four days. Jaundice disappeared. She made an excellent recovery and is apparently cured.

CASE 8.

A case of cancer complicating gall stone disease. Mrs. Van D. Referred by Dr. Taylor January, 1906. Aet. 52. Suffered from indigestion and pains in the epigastric region for years. When the pains are severe she always leans forward while walking or standing. While sitting she

very often bends forward over the back of a chair, that being the most comfortable position for her when the colic occurs. During the past year she has not had so many attacks of colic. The pain was generally relieved if vomiting occurred. The colic generally came at midnight or shortly afterward.

Operated upon January 29, 1906. Gall bladder almost entirely hidden by intestines, which were firmly adherent to it. The fundus was hard and at least three-quarters of an inch in thickness and the seat of carcinoma as shown by our pathologist Dr. Sandt. At a point where there were no adhesions on the anterior inferior aspect of the gall bladder a stone was seen shining through the peritoneum which had ulcerated its way through the mucosa and muscularis and was still covered with peritoneum. The stones had also ulcerated through the cystic neck of the gall bladder so that when adhesions of the intestines thereto were separated from the cystic neck, stones escaped, and below this point the neck was sacculated and contained a number of stones. The gall bladder, which was rather larger than normal, was so thoroughly filled with stones—107 in number—that it formed a hard irregular tumor. These stones were of such high specific gravity that many of them floated upon water. The gall bladder was removed and drainage placed to the bottom of the field of operation. The patient lived but thirty-six hours after operation. The specimen which I exhibit shows a gall stone perforating the wall of the gall bladder.

It should be said that this patient had been confined to her bed and the house for weeks before she was taken to the hospital for operation, that her temperature was sometimes elevated, that she also had fever, her digestion had been very poor and she was somewhat emaciated.

CASE 9.

Mrs. K. Referred by Dr. Elsing. Aet. 30. Married twelve years. One child one year old. No abortions. I first saw this patient on April 6, 1906. She then presented symptoms of tubal pregnancy, which diagnosis was confirmed by operation on the day following. She made a rapid recovery and left the hospital in a fortnight or so. In May, 1906, the patient had severe pain in the region of the gall bladder for several days in succession. Afterward she had terms of one, two or three weeks when no pain was experienced in the epigastric or gall bladder region. Her attacks of

colic were so severe that she at times had to send for her physician. The pains referable to the gall bladder were always very much worse during menstruation. With the colic accompanying each menstruation a slight elevation of the abdominal wall was visible over the gall bladder and it was then very tender under pressure. It should be said that this patient in the first month after leaving the hospital and before her gall stone symptoms presented regained color, looked well and did her own work. From September 15th until operated upon—on November 3d—the patient pretty steadily had pain in the region of the gall bladder, and from September 15th until operated upon she hardly passed a day without some pain in the region of the gall bladder.

Operation. A six inch abdominal incision to the right of the median line. Gall bladder entirely hidden by the adhesions of the intestines and other viscera. Bladder itself was about one and one-half inch in diameter and very short. While separating the adhesions from the fundus of the gall bladder stones began to escape. The wall of the fundus at this point had ulcerated and perforated and adhesions over the perforation had saved the patient. The neck of the gall bladder was very large. At the neck of the gall bladder and the common duct there was formed a diverticulum. This diverticulum contained about one-third of the thirty-nine large gall stones removed from this patient. The walls of the gall bladder were very much thickened. The corpus and fundus of the gall bladder were exsected, the diverticulum was incised, and the stones removed there-through. Three stones in the liver ducts were found and removed. The diverticulum was sewed with catgut. The intra-abdominal field of operation was thoroughly sponged with one to one-thousand formalin solution, afterwards with normal salt solution and the abdomen closed without drainage. Patient recovered and was cured.

CASE 10.

Mrs. M. C. R. Referred by Dr. Dillard January 17, 1907. Aet. 45. Three children; youngest 14. Rather emaciated and skin in poor color.

In March, 1904, this patient had an attack of appendicitis, was attended by her physician, and was in bed four or five weeks. She then had a good deal of fever and developed a tumor in the right side at McBurney's point. She says that since she had the appendicitis in 1904 she has often

felt something wrong in her right side higher than McBurney's point.

This patient gives no history whatever of ever having had gall-stone colic. On pressure there is some tenderness slightly higher than McBurney's point. This tenderness is even more marked as pressure is made near the free border of the liver in the region of the gall bladder. At that point there is more tenderness than elsewhere. At a point directly over the gall bladder there were marks on the skin of the recent application of tincture of iodine. This patient had been sick for three or four weeks. In the beginning of her trouble her sickness was thought due to la grippe. Diagnosis probably cholecystitis.

A median line suprapubic incision was made January 21, 1907. The appendix, which was removed, was long, presented no mark of constriction and no adhesions worth mentioning, and through the abdominal incision there was felt a rather small gall bladder containing two stones. Suprapubic incision was closed. A gall-stone incision was made, the gall bladder separated from the liver, its neck tied with catgut, disinfected and the cysticus removed. Incision was sewed without drainage. This gall bladder was small, its walls slightly thickened. A stone was found within the gall bladder and another rough stone was removed from the wall of the gall bladder which had evidently ulcerated through the muscular and mucous coats of the cysticus.

Patient made a good recovery, and is evidently cured of any trouble referable to either the appendix or gall bladder. This patient had occasionally had slight pains in the epigastric region after eating, but there is no history of her ever having had severe colic referable to the epigastric or gall bladder region.

26 Church St., Paterson, N. J.

COMPLICATIONS IN DISEASE CONDITIONS OF THE BILIARY SYSTEM.

By G. K. Dickinson, M. D.,
Jersey City.

Until recent times pathology as written was terminal. As a sequence various conditions discovered from time to time in conjunction with disease states were considered as in part independent of the same, and given a specific term, "complication." Recent betterment of knowledge, obtained

through experimentation on animals; through minor lesions existing without symptoms, discovered by the surgeon, and through advances in our knowledge of biochemistry, has demonstrated that these so-called complications are but an extension of the primary disease to other structures through channels of least resistance. Intensity of focal action and negative resistance on the part of the organism is the reason for numerous lesions existent but more or less quiescent in demonstration, while the original lesion through its intensity develops a train of symptoms masking all others.

Conditions leading up to an extension of disease processes of the region under discussion are:

1. Receptive nerve states;
2. Obstruction of the flow of bile, on the one hand depriving the intestine of its accustomed fluid, and on the other the physiologic and dynamic conditions induced by its failure to be discharged;
3. Conditions of tension;
4. Bacterial invasion either ascending from the duodenum or transmitted through the blood;
5. Inflammatory states in surrounding structures and their concomitants;
6. Ulcerations through calculi;
7. Hyperplasia of regular or irregular development.

1. When we consider that the gall-bladder region is supplied by filaments from the three divisions of the nervous system, the cerebral through the pneumogastric, the spinal and the sympathetic, it is not to be wondered that a person in great pain should through defect of nerve tone have some disturbance in parts innervated by one or the other of these same nerves. It is a matter of common observation that intense pain long continued produces a condition analogous to shock—high tension, cold extremities, pallid and moist skin, etc. It is further observed that heart murmurs may develop at this time, persisting for one or more days after the pain has ceased. The plausible inference is that a paretic condition of the auriculo-ventricular ring has been induced, preventing a proper approximation of the valves. This, in degenerate hearts, may be sufficient to lead to death.

Reflexly through the sympathetic and pneumogastric, in interstitial pancreatocholedochitis, the parotid may be affected, characterized by excessive flow of saliva. Through the splanchnic, which has a continuity of neuron (differing from the spinal in that respect), we frequently obtain acute

dilatation of the stomach or of portions of the intestinal tract, and may even find volvulus induced as a result of irregular intestinal peristalsis. If appendicitis be pre-existent without complete resolution, the lowered nerve tone may express itself there in pain and tenderness, substituting, as it were, the receding colic.

2. To correctly state the defects in digestion and intestinal tone due to the more or less complete suppression of bile flow, one should know the physiologic value of the head of the pancreas as distinguished from the body and tail, as the former embryologically might be considered as accessory to the liver, being an evagination from the common bile duct, whereas the latter developed from a separated part of the duodenum. Later they seemingly become amalgamated, the ducts coalescing; nevertheless, by careful dissection the head may be cleaved from the body.

An important property of the bile perhaps not fully appreciated is its high surface tension. As oil thrown on water spreads out broadly, becoming iridescent on account of its tenuity, so bile entering the intestines drop by drop will disseminate over a large surface, invigorating the intestinal epithelia, so that, through their anti-enzymes contained protection ensues against both the acid stomach contents and the trypsin of the pancreatic juice and also that organic iron be more readily absorbed. Defective elimination of bile whether from obstruction or physiologic causes is often attended by a costive habit and a production of intestinal gases, probably due to absence of the cholates in the upper intestinal tract, Nature's physiologic cholagogue.

If the bile be shut off from the intestinal tract, largely or completely, we have, unless the harmones of appetite cut down fat hunger, a putrefaction of fats coming on higher up in the intestinal tract, inviting the gas and colon bacilli to ascend higher than normal in their destructive work; the pepsin and hydrochloric acid from the stomach are not as promptly neutralized and the pancreatic juice loses its physiologic stimulus. As a result of these perversions we have increased tendency to epithelial degeneration, duodenal ulceration, diminished absorption of the products of digestion, and increased absorption of the products of putrefaction with their diverse effects and constipation. If the obstruction be in the common duct and be persistent, bile will yet be secreted, only to be re-absorbed through the lymphatics, rendered patent by disten-

sion and rupture, leading to icteric conditions and cholate toxemia, with its depression of the central nervous system, and terminal coma. This toxemia affects tissue cells of all types; injuring the capillary endothelia leading to spontaneous hemorrhages, the renal cells producing nephritis, the liver and pancreas causing glycosuria, the blood retarding coagulation and inducing hemolysis.

If the obstruction be to the cystic duct, the bladder gradually enlarges from accumulation of fluid secreted containing large quantities of mucus. The coloring matter of the bile is first absorbed, and the bile salts next, the remaining fluid possessing none of its original characters. If the obstruction be at the common orifice of the bile and pancreatic ducts, bile may pass into the substance of the pancreas and induce thereby the several types of pancreatitis—the interstitial and even the acute with hemorrhage.

3. Bile is secreted under low tension as compared with some other glands. As a consequence, alteration in structure of the bile tract and liver induced through this condition will naturally be slow of progress. According as to whether the obstruction be steadily maintained or intermittent we will have two distinct pathologic results. Intermittent tension acts as an irritant, stimulating interstitial hyperplasia, which is followed by subsequent contraction. This gives interstitial cholelithiasis, the small contracted gall-bladder and hypertrophic cirrhosis of the liver, occasionally associated with interstitial pancreatitis. On the contrary, when stasis is constant, the focus being on the gall-bladder, particularly when the obstruction is in the cystic duct, we obtain first, through compression, retardation of flow in the veins, then tissue degeneration, with or without proceeding hyperplasia, terminating in the large and thick or fatty gall-bladders.

4. Through bacterial invasion, either ascending from the duodenum or migrating through the portal vein, local resistance being diminished, we have an extension and continuance of disease processes of a diverse inflammatory type. Bile not being bactericidal, and to a certain degree a culture medium, will harbor germs for an indefinite time. The gall-bladder without microscopic evidences may be infested with *B. coli* or *B. typhosi* for many years, making the party an unconscious disseminator of typhoid fever. Suppurative cholangitis induces the intermittent fevers characterized by regularity of chills, and may produce multiple pyogenic foci in the liver. In the gall-

bladder, particularly with impacted stones and tension, we may obtain acute cholecystitis and phlegmonous conditions leading to local or generalized gangrene.

5. By extension of inflammation surrounding structures become implicated—protective adhesions form with the omentum, which, if the inflammation be not too intense, may bring about resolution through the enzymes of the leucocytes and phagocytic action.

If adhesions attach the gall-bladder to the stomach near the pyloric end or the duodenum changes in position of the liver may produce traction on the same, inducing gastric dilatation, or evidences of irritation in the neighborhood of the adhesion. Massive adhesions to the transverse colon may inhibit its action, producing a similitude of cancerous invasion. A heavy pendant gall-bladder can in time drag downwards the liver margin, so that thereby adhesions occur between it and the appendix, and even the pelvic organs. If the gall-bladder be in any of its anomalous positions posteriorly or in the substance of the liver, conditions simulating abscess formation in those parts may entail.

6. The pressure of calculi in inflamed or degenerate gall-bladders or ducts will, through pressure necrosis, cause ulceration, and if adhesions form, calculi do pass through them to adjoining viscera, such as to the stomach, intestinal tract, or urinary bladder, and if no adhesions occur peritonitis ensues. If a stone should slough out of the ampulla of Vater its sphincter muscle will be obliterated, and microorganisms and acid gastric juices before being neutralized by the alkaline juices of the duodenum will gain entrance to the pancreatic duct, particularly if Ochner's ring be spastic, and set up some type of pancreatic disease.

7. Calculi often become impacted in the cystic duct and after a process of time produce hyperplasia of the mucosa, which may take an adenomatous changes and eventually become a true adeno-carcinoma, spreading by dissemination peripherally.

(Failure to secure proofs in time compels us to defer the remaining papers of this symposium until the November issue of the Journal, when Dr. Musser's paper on "Medical Treatment of Diseases of the Gall Bladder;" Dr. J. B. Deaver's paper on "The Surgical Treatment of Gall Bladder Disease," and also the Discussion on the papers of this Symposium will appear.—Editor))

TETANUS AND THE ANTITETANIC TREATMENT.*

By Daniel Strock, M. D.,
Camden, N. J.

The subject of tetanus and its treatment cannot be considered trite or hackneyed, as yet, notwithstanding the great amount of existing literature bearing upon this terrible disease. So long as the average statistics of mortality are placed at about 80 per cent., and range from 30 to 98 per cent., with thousands of cases occurring annually, every item of information having relation to its causation and possible cure must have a distinct value.

The disease tetanus is the result of the introduction into the tissues of a specific organism called the tetanus bacillus, which, in suitable environment, produces certain toxalbumins, that, in turn, are diffused by various channels. Briefly stated, results of recent investigations indicate the existence of a powerful affinity between the tetanus toxins and the central motor ganglia; and, to reach the ganglia, the tetano-toxins enter the motor nerves of the affected part, passing within the axis cylinders, thence upward. Also, by absorption through the lymphatics they enter the blood current, and are thus conveyed to the central ganglia, indirectly, through the motor nerve terminals of muscles. As a result of the union thus affected, we have the ensuing phenomena, which are chiefly spasmodic.

For the purposes of this paper it is unnecessary to speak of the various subtitles of tetanus, such as traumatic, idiopathic, puerperal, neonatorum, etc. It is probable the day is not far distant when they will be obsolete and clinically they should now be ignored. But a few words about head tetanus, the Kopf-tetanus of German writers, will not be inappropriate. This variety occurs after injuries in the region of the distribution of any of the twelve cranial nerves; and is accompanied by paralysis of one or more of the motor nerves, and occasionally with sensory disturbance of the fifth nerve. While the tendency is to the localization of tetanic spasms in the lower jaw, neck, and to the muscles concerned in deglutition and respiration, many cases present the added symptoms of generalized tetanus of severe type. The mortality in Kopf-tetanus is not as high as in the ordi-

*Read at the 141st Annual Meeting of the Medical Society of New Jersey, June 1907.

nary cases of tetanus, the average of collected cases being placed at 55.4.

The possibility of immunizing against or curing tetanus by means of an antagonistic serum engaged the attention of investigators about twenty years ago. Later Tizzoni and Satani used the active principle of a culture which they called "tetanus antitoxine" and claimed to have cured ten out of fourteen cases in which it was used. Since that time various methods to introduce it into the system have been used, such as through trephine openings, intraspinal by spinal puncture, intravenous and subcutaneous puncture. In view of the fact that tetano-toxin is always found in the motor nerves of the affected part, and that the toxin travels faster than the antitoxin, Porter, of Boston, has suggested the introduction of antitoxin into the higher peripheral motor nerves, as the hypoglossal, spinal accessory, brachial plexus, etc. But no matter how the serum has been used, the results have been disappointing, and probably it is the general impression of the profession to-day that, in acute cases of tetanus, antitetanic serum is of little value. In view of this general impression, in which I have hitherto been in full accord, I desire to ask your consideration of the results of treatment in a few cases directly under my direction.

First, I wish to premise by saying that previous to the period to which I shall refer I have been in contact with a number of cases of tetanus, following wounds of every description, and I have never known one to recover, no matter what the method of treatment pursued. In my own cases I began the use of tetanus antitoxin about six or eight years ago. With fear and trembling this treatment was inaugurated, and the patients at this time received one injection of ten cubic centimeters, to be followed by another the next day, or the day following, if alive. By gradual steps, in the years following, the amount given in twenty-four hours was increased until it reached the point where from four to six injections of ten cubic centimeters would be given in twenty-four hours, covering a period of several days in succession. The results of this larger quantity appeared to be, in a few cases, to delay the approach of death, but did not affect the uniform termination of the disease. The last case treated during this period that I shall identify as the first series of antitoxin injections, the patient lived fourteen days and received the injec-

tions at more frequent intervals than any who had preceded him.

Following this final experience in the above series of cases, and after much serious thought, I concluded that, if the antitoxin possessed any virtue in fully developed cases, it was exerted only if large quantities are given, and determined to put this idea into practice if opportunity was afforded. The opportunity was afforded during my recent term of service at the Cooper Hospital. On October 2d, 1906, a colored man, a hodcarrier, was admitted with fully developed symptoms, with the history of having punctured his foot one week previously with a clean wire nail. At the time of admission the wound was unhealed, patient was rigid, with frequent convulsions. During the early progress of the disease in this case, opisthotonos was a very marked symptom, the jaws were tightly locked, and convulsions supervened at hourly intervals. He was immediately given an injection of ten cubic centimeters of antitoxin serum, which was to be repeated every two hours. In addition ten grains of chloral hydrate were given every two hours for a period, and at times bromide of soda and calomel. The injections of ten cubic centimeters of the serum were given every two hours, day and night, for a period of fifteen days, and thereafter for several days at intervals of four hours. During the remaining days of treatment, the injections were given during the daytime only. He was in a wheel chair on the twenty-first day, and specific treatment was discontinued on the twenty-third day of the disease. He received 225 injections of the serum; that is, 2,250 cubic centimeters, or in liquid measure two quarts and nearly one-half pint.

The day following the admission of the above-described case a physician asked me to admit a tetanus patient who had the previous week punctured his finger with a splinter of wood while working at his trade, carpentering. Over the telephone, this was described as a mild case, as he had walked to the physician's office. From there he went to the hospital unaided. He was immediately placed upon ten cubic centimeters of serum every two hours; but in less than twenty-four hours after admission he died.

The third patient of this series was admitted three days after the death above-mentioned. This was a case of Kopf-tetanus. The patient had received a cut over the right eyebrow, which was unhealed at the time of admission to the hospital. There was complete paralysis of the right facial

nerve, with marked trismus, great difficulty in swallowing, and some impairment of the muscles of respiration. Opisthotonos and convulsions were absent. The patient was immediately given ten cubic centimeters of the serum, which was continued until seventy-two doses were given, during a period of thirteen days. At this time she was well enough to go home, but the facial paralysis and stiffness of the jaws had not entirely disappeared.

The next case treated was a boy, aged nine years, with the history of having crushed his thumb four weeks previously. It was described as being nearly healed on Hallowe'en, when he hurt it again, and to stop the profuse bleeding cobwebs were used. Three days later—Saturday evening, November 3d, 1906, his jaws became stiff and he began to have convulsions. He was brought to the hospital about noon of November 5th. In consideration of his age, he was given ten cubic centimeters of serum every four hours, only. He lived to receive but four injections.

The last case of this series was also a colored man, aged about fifty years, and a hodcarrier. I quote from the hospital history of the case, written on day of admission: "On the 9th of November, while working on a building, a fellow-workman dropped a board, crushing the index finger of the right hand. It was dressed at the Pennsylvania Hospital, Philadelphia, and subsequently by a friend. One week ago, while working in the rain, patient thinks he took cold, and was unable to work the next day because of pains in the back. Two days later his jaws became stiff and sore and have since gotten worse. Yesterday morning he began having tetanic spasms which have since become more frequent. Movement or excitement brings on convulsions and opisthotonos. Wound has not entirely healed."

On admission he presented the typical symptoms of an advanced case of tetanus—trismus, rigidity, opisthotonos, convulsions. He was immediately placed upon ten cubic centimeters of antitetanic serum every two hours, beginning December 12, 1906, which was continued until the 17th, when the serum was given every four hours until the 26th. Thereafter he received two or three doses a day until, in all, 140 injections were given—1,400 cubic centimeters. He fully recovered.

Thus, of five cases, all presenting typical avenues of infection, and all presenting classical symptoms of fully developed tetanus, three recovered.

In all the cases the diagnosis was made by other physicians and my assistants before I saw them, and all I had to do was to confirm it and decide upon the treatment. In view of my past unfortunate experience with this disease, having a mortality of 100 per cent. extending over a period of many years, I am reluctant to believe that this last series of cases, with a mortality of 20 per cent., is simply an unexplainable coincidence. In casting about for a solution of the problem, I desire again to call to your attention the statement made above, that I had previously observed that the disease was prolonged, although the result had not been affected, when the serum had been given at four hours' intervals for several days in succession. As a result of that observation a definite plan of treatment had been outlined, in advance of seeing other cases.

There is natural scepticism as to the value of treatment when applied to a few cases; and the profession is justified in withholding approval on what may seem insufficient evidence. But the serum treatment of tetanus is not a new thing. It has been used in all lands, and heroic measures have prevailed to introduce it into the victim's system—measures in some respects fraught with as much danger as the disease. But in all cases where it has been used, so far as I can learn, the quantity given the patient has been small, certainly small as compared with the total dosage in my cases. In reports of cases, we find one or two doses of ten cubic centimeters mentioned; in others, one injection of ten cubic centimeters given every day, or every other day; and at least one manufacturing company, in a book descriptive of the uses of tetanus antitoxin, says: "The majority of cases require from six to twelve curative doses," of thirty cubic centimeters each. In other words, from 180 cubic centimeters to 360 cubic centimeters.

It is the results obtained by the above outlined method of using the tetanus antitoxin that the profession contemplates when it accepts, probably as the final word upon the subject, the opinion expressed by Senn, so recently as in April, when he said: "It was at first the ardent hope and sanguine expectation of the medical profession that this serum would prove curative in the treatment of tetanus; but this hope has been vanquished by a large experience." It is undoubtedly a fact that many cases of diphtheria have been lost because of the small doses of antitoxin used, particularly in the

pioneer days of serum therapy. Is it improbable that tetanus cases have been lost for the same reason? There can be no doubt but that many physicians to-day hesitate to use antitoxin, and many who do use but a dose or two and believe they are not justified in doing more than this. It is difficult to explain this fear of the serum, but it really does exist, and no doubt is, in a large measure, responsible for its continued sparing use, even by those who do resort to this method of treatment. Experience has fully demonstrated that small doses, no matter how introduced, are disappointing. If it can be shown that large doses may cure, then it becomes our duty to use them.

As a result of my observation and experience in the use of the serum, I am of the opinion, not only that much larger quantities must be used in the treatment of cases, but that larger initial doses should be given, and I feel regret that, in the two cases of the last series that died, this course was not pursued. I believe that at least ten cubic centimeters should be given every hour, in adults, until evidence of improvement is present. I am of the opinion that this will be preferable to throwing a much larger quantity into the circulation at intervals of several hours. My previous experience with the serum did not permit me to form an opinion as to the possibility of it unpleasantly affecting the individual, after recovery, because there were no recoveries. But, I can now say, after the use of the enormous quantities indicated above, there has been no unpleasant after effect whatever.

In concluding this brief history of my cases, I wish to say I feel encouraged to believe that the pessimistic view entertained by the profession as to the use of antitetanic serum in fully developed tetanus will be modified in the future. Of the value of antitoxin in the cases of suspected wound infection, there can now be no reasonable doubt, and it would seem that the physician is culpable who fails to give his patient the benefit of this fully recognized immunizing agent, at the same time thoroughly cleansing the wound.

Finally, it is proper to say that all the antitoxin I have used has been introduced subcutaneously, and that the results here detailed may be correctly judged, it is also proper to say that the serum was the Parke-Davis & Co. manufacture.

SANATORIA, THEIR ADVANTAGES AND LIMITATIONS.*

BY IRWIN H. HANCE, M. D., LAKEWOOD.

A residence of nearly five years in The Adirondack Cottage Sanatorium, when it was the only sanatorium in this country for the treatment of tuberculosis, gave me a knowledge of its value and workings which could be secured in no other way. Since then many sanatoria have been established, and each year closes with an increasing number of such institutions, both State and private, and the outlook for the consumptive becomes a brighter one; whereas, formerly he had almost nowhere to go for help and treatment, now he is able to get treatment and advice close to home.

The advantages of the sanatorium to the individual are both direct and indirect. First, as regards treatment: The disease is a slow, chronic one, and the treatment, consequently, a long one. It is most exacting as to details and the best results are secured by those who are familiar with the varying types of the disease and all the minute details of the treatment. In other words, the patient must be under close observation all the time, and as his means are usually limited, this can be best secured in a sanatorium. Consumptives were formerly advised to go West, buy a broncho, live in the saddle and get well; now the trend of most teachings is drink all the milk possible, fill up on raw eggs, eat all you possibly can and stay at home. As a result, patients get the impression the disease is more easily cured than is possible, and thereby lose, or minimize, their chances of recovery, which is greatest during the early stages of the disease.

The greatest direct value to the patient is the instruction which he gets in a sanatorium and the encouragement to follow out the treatment most faithfully resulting from his association with the other inmates. He learns accurately what the disease is, what causes it and how it can be cured, and lastly how he can prevent re-infection of himself and avoid infecting others. He thus secures a sufficiently accurate scientific knowledge of the subject to enable him to follow out willingly and wisely the orders of his physicians while resident in the sanatorium, and when dismissed he is capable of spreading broadcast his knowledge.

This educational training of the individual is the weightiest factor for good in the great problem of the crusade against tuberculosis; each man or woman becomes a missionary in the propagation of the information, the value of which affects the individual in his better care of himself, particularly as regards hygiene; the family in the greater protection which he safeguards them with; the community-at-large by reason of the removal of one more focus of infection, and through the spread of the knowledge which he is sure to make use of for the welfare of himself, as well as his fellows.

The results of sanatorium treatment are given by Laurason Brown, for the Adirondack Cottage Sanatorium:

In a summary of 1,500 cases discharged from the Adirondack Cottage Sanatorium from two to eighteen years, he gives the following: 1,066 patients were traced, 434 untraced. Of these 1,066, 46.7 per cent. are still living; 30 per cent. are well; 6.5 per cent. arrested; 4 percent. have relapsed;

*Read at the thirty-second annual meeting of the New Jersey Sanitary Association, 1906.

5.2 per cent. are chronic and 53.3 per cent. are dead. In other words, nearly one in three of all classes of patients treated remained well after two years or more.

Vincent Y. Bowditch states that in seventy-nine of the one hundred and sixty-four patients treated at Sharon, fifteen miles out of Boston, the disease was recorded as arrested, being 48.17 per cent.; of these twelve, or 15.2 per cent., have died since leaving the institution. "The majority write enthusiastically of their good health, some of them having left the sanatorium ten years ago. All are employed in their homes, or in occupations which, as a rule, allow them to be out of doors more than before."

The limitations of a sanatorium are due chiefly to two factors—the expense and the small number of people who can be accommodated. The original outlay for the plant must necessarily be considerable. Of late great reductions on the buildings for the patients have been brought about by constructing houses with lean-to attachments, whereby the patients all sleep out of doors and use the central part between the two wings for assembly and dressing-rooms. Naturally, the expense for food is a very large one, as this is the fundamental part of the treatment. To secure any result a minimum of six months' treatment is requisite; thereby vacancies are infrequent and the actual number of patients accommodated is relatively lessened. As regards the patient, this enforced long absence from work and home entails added hardships upon himself and his family, and prevents many a person from remaining in an institution as long as he should.

In summing up the question, I wish to present to you a letter from Dr. Trudeau, who has had a larger and wider experience in the treatment of tuberculosis than any man living in this country, and also one from Dr. Bowditch, who, next to Dr. Trudeau, has had the longest experience in sanatorium treatment of this disease.

"Dear Dr. Hance:

"In reply to your question as to my opinion about the value and limitations of sanatorium treatment for tuberculosis, I can say that from an experience of over fifteen years with sanatorium treatment of tuberculosis at Sharon, Mass., and more recently with seven years' experience at the State Sanatorium at Rutland, Mass., I am thoroughly convinced that in the great majority of cases it holds out more hope of permanent recovery than any other method. It goes almost without saying that it is not suitable for *every* case of consumption, and especially in cases of far advanced disease, where lack of vitality makes the rigorous methods employed in winter unsuitable; but for the hopeful cases it holds out, in my opinion, the best prospects of relief.

"The supervision of patients, who are told what to do and what not to do at a critical time of the disease, when errors in diet and over-exercise may do harm, I regard as the chief factor in bringing about favorable results, rather than the special influence of climatic conditions. In saying this, however, now that so many successful results have been obtained by less radical methods, I do not wish to be classed with those who hold the extreme view, as it seems to me, that change of climate never need be urged, for in certain cases I believe that such a change is followed by the most beneficial results.

"As to the educational effect of sanatoria upon the public, I believe it cannot be over-estimated. Each patient acts as a missionary in the commu-

nity to teach the value of good food and fresh air as a means of prevention, as well as cure of disease. In this fact lies the chief and great benefit to the human race of such institutions.

"Believe me

"Yours very truly,

"VINCENT Y. BOWDITCH."

THE NEW YORK STATE LAW REGULATING THE PRACTICE OF MEDICINE.

CHAP. 344.—AN ACT TO REGULATE THE PRACTICE OF MEDICINE, AND TO REPEAL ARTICLE EIGHT OF CHAPTER SIX HUNDRED AND SIXTY-ONE OF THE LAWS OF EIGHTEEN HUNDRED AND NINETY-THREE AND ACTS AMENDATORY THEREOF.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Definitions as used in this act:

1. The education department means the education department of the State of New York, as provided for by Chapter forty of the laws of nineteen hundred and four.

2. University means university of the State of New York.

3. Regents means board of regents of the university of the State of New York.

4. Board means the board of medical examiners of the State of New York.

5. Medical examiner means a member of the board of medical examiners of the State of New York.

6. Medical school means any medical school, college or department of a university, registered by the regents as maintaining a proper medical standard and as legally incorporated.

7. The practice of medicine is defined as follows: A person practises medicine within the meaning of this act, except as hereinafter stated, who holds himself out as being able to diagnose, treat, operate, or prescribe for any human disease, pain, injury, deformity or physical condition, and who shall either offer or undertake, by any means or method, to diagnose, treat, operate, or prescribe for any human disease, pain, injury, deformity, or physical condition.

8. Physician means a practitioner of medicine.

SEC. 2. *Qualifications.*—No person shall practice medicine, unless registered and legally authorized prior to September first, eighteen hundred and ninety-one, or unless licensed by the regents and registered under Article eight of Chapter six hundred and sixty-one of the laws of eighteen hundred and ninety-three and acts amendatory thereto, or unless licensed by the regents and registered as required by this act; nor shall any person practice under this act who has ever been convicted of a felony by any court, or whose authority to practice is suspended or revoked by the regents on recommendation of the State board. The conviction of a felony shall include the conviction of any offense which if committed within the State of New York would constitute a felony under the laws thereof.

SEC. 3. *The State board of medical examiners.*—There shall be a State board of medical examiners of nine members who shall be appointed by the regents and who shall hold office for three years from August first of the year in which appointed. In constituting the first board, however, to be appointed under this act, the regents shall designate three members to serve for one year from August first, nineteen hundred and seven; three members to serve two years from

August first, nineteen hundred and seven; and three members to serve for the full term of three years from August first, nineteen hundred and seven. Thereafter the regents shall annually appoint three members to fill the vacancies caused by expiration of term of office, and may at any time fill vacancies on the board caused by death, resignation, or removal from office. No person shall be appointed a member of the board of medical examiners who is not eligible to receive a license to practice from the regents in accordance with the provisions of this act or of Chapter six hundred and sixty-one of the laws of eighteen hundred and ninety-three and acts amendatory thereof and who has not been in practice in this State for at least five years prior to date of appointment. The regents may remove any member of the board of examiners for misconduct, incapacity or neglect of duty. The regents shall appoint a secretary to the board of examiners, who shall not be a member of the board, and who shall hold office during the pleasure of the regents and who shall receive an annual compensation of four thousand dollars, payable from the fees received under this act. The secretary shall be a duly licensed physician.

SEC. 4. *Certificate of appointment; oath; powers.*—Every medical examiner shall receive a certificate of appointment from the regents and before beginning his term of office shall file with the secretary of State the constitutional oath of office. The board, or any committee thereof, may employ counsel, shall have the power to compel the attendance of witnesses and may take testimony and proofs concerning all matters within its jurisdiction. The board may, subject to the regents' approval, make all by-laws and rules not inconsistent with law needed in performing its duty; but no by-law or rule by which more than a majority vote is required for any specified action by the board shall be amended, suspended or repealed by a smaller vote than that required for action thereunder.

SEC. 5. *Expenses.*—The fees derived from the operation of this act shall be paid into the State treasury, and the legislature shall annually appropriate therefrom for the education department an amount sufficient to pay all proper expenses incurred pursuant to this act.

SEC. 6. *Officers; meetings; quorum; committees.*—The board shall annually elect from its members a president and a vice-president for the academic year, and shall hold one or more meetings each year pursuant to call of the regents. At any meeting a majority shall constitute a quorum; but questions prepared by the board may be grouped and edited, or answer papers of candidates may be examined and marked by committees duly authorized by the board and approved by the regents.

SEC. 7. *Admission to examinations.*—The regents shall admit to examination any candidate who pays a fee of twenty-five dollars and submits evidence, verified by oath, and satisfactory to the regents, that he

1. Is more than twenty-one years of age.

2. Is of good moral character.

3. Had prior to beginning the second year of medical study the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State.

4. Has studied medicine not less than four school years, including four satisfactory courses of at least seven months each, in four different calendar years in a medical school registered as

maintaining at the time a standard satisfactory to the regents. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State whose minimum graduation standard is less than that fixed by statutes for New York medical schools. The regents may, in their discretion, accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' reputable practice, provided that such substitution be specified in the license, and, as the equivalent of the first year of the fourth requirement, evidence of graduation from a registered college course, provided that such college course shall have included not less than the minimum requirements prescribed by the regents for such admission to advanced standing. The regents may also in their discretion admit conditionally to the examination in anatomy, physiology, hygiene, sanitation, and chemistry, applicants nineteen years of age certified as having studied medicine not less than two years, including two satisfactory courses of at least seven months each, in two different calendar years, in a medical school registered as maintaining at the time a satisfactory standard, provided that such applicants meet the second and third requirements.

5. Has either received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practice medicine in some foreign country unless admitted conditionally to the examinations as specified above, in which case all qualifications, including the full period of study, the medical degree and the final examinations in surgery, obstetrics, gynecology, pathology, including bacteriology, and diagnosis must be met. The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the regents that before beginning the first annual medical course counted toward the degree, unless matriculated conditionally as hereinafter specified, he had either graduated from a registered college or satisfactorily completed a full course in a registered academy, or high school; or had a preliminary education considered and accepted by the regents as fully equivalent; or held a regents' medical student certificate; or passed regents' examinations securing sixty academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally as hereinafter specified. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or fifteen counts of the preliminary education requirement, provided the name and deficiency of each student so matriculated be filed at the regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree.

6. Where the application be for a license to practice osteopathy, the applicant shall produce evidence that he has studied osteopathy not less than three years, including three satisfactory courses of not less than nine months each in three different calendar years in a college of osteopathy maintaining at the time a standard satisfactory to the regents. After nineteen hundred and ten the applicant for a license to practice under this act shall produce evidence that he has studied not less than four years, including four satisfactory

courses of not less than seven months each in four different calendar years in a college maintaining at the time a standard satisfactory to the regents.

SEC. 8. *Questions*.—The board shall submit to the regents, as required, lists of suitable questions for thorough examination in anatomy, physiology, hygiene, sanitation, chemistry, surgery, obstetrics, gynecology, pathology, including bacteriology, and diagnosis. From these lists the regents shall prepare question papers for all these subjects, which at any examination shall be the same for all candidates, except that the examination may be divided as provided in section seven.

SEC. 9. *Examinations and reports*.—Examinations for licenses shall be given in at least four convenient places in this State and at least four times annually in accordance with the regents' rules, and shall be exclusively in writing and in English. Each examination shall be conducted by a regents' examiner who shall not be one of the medical examiners. At the close of each examination the regents' examiner in charge shall deliver the questions and answer papers to the board or its duly authorized committee, who, without unnecessary delay, shall examine and mark the answers and transmit to the regents an official report, signed by its president and secretary, stating the standing of each candidate in each branch, his general average and whether the board recommends that a license be granted. Such a report shall include the questions and answers and shall be filed in the public records of the university. If a candidate fails on first examination, he may, after not less than six months' further study, have a second examination without fee. If the failure is from illness or other cause satisfactory to the regents they may waive the required six months' study.

SEC. 10. *Licenses*.—On receiving from the State board an official report that an applicant has successfully passed the examinations and is recommended for license, the regents shall issue to him a license to practice according to the qualifications of the applicant. Every license shall be issued by the university under seal and shall be signed by each acting medical examiner and by the officer of the university who approved the credential which admitted the candidate to examination, and shall state that the licensee has given satisfactory evidence of fitness as to age, character, preliminary and medical education and all other matters required by law, and that after full examination he has been found properly qualified to practice. Applicants examined and licensed by other State examining boards registered by the regents as maintaining standards not lower than those provided by this article and applicants who matriculated in a New York State medical school before June fifth, eighteen hundred and ninety, and who received the degree of doctor of medicine from a registered medical school before August first, eighteen hundred and ninety-five, may, without further examination, on payment of twenty-five dollars to the regents and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas conferring all rights and privileges of a regents' license issued after examination. The commissioner of education may in his discretion on the approval of the board of regents indorse a license or diploma of a physician from another State, provided the applicant has met all the preliminary and professional qualifications required for earning a li-

cense on examination in this State, has been in reputable practice for a period of ten years, and has reached a position of conceded eminence and authority in his profession. If any person, whose registration is not legal because of some error, misunderstanding or unintentional omission, shall submit satisfactory proof that he had all requirements prescribed by law at the time of his imperfect registration and was entitled to be legally registered, he may on unanimous recommendation of the State board of medical examiners receive from the regents under seal a certificate of the facts which may be registered by any county clerk, and shall make valid the previous imperfect registration. Before any license is issued it shall be numbered and recorded in a book kept in the regents' office and its number shall be noted in the license and a photograph of the licensee filed with the records. This record shall be open to public inspection, and in all legal proceedings shall have the same weight as evidence that is given to a record of conveyance of land.

SEC. 11. *Registry; revocation of license; annulment of registry*.—Every license to practice medicine shall, before the licensee begins practice thereunder, be registered in a book kept in the clerk's office of the county where such practice is to be carried on, with name, residence, place and date of birth, and source, number and date of his license to practice. Before registering, each licensee shall file, to be kept in a bound volume in the county clerk's office, an affidavit of the above facts, and also that he is the person named in such license, and had, before receiving the same, complied with all requirements as to attendance, terms and amount of study and examinations required by law and the rules of the university as preliminary to the conferment thereof; that no money was paid for such license, except the regular fees paid by all applicants therefor; that no fraud, misrepresentation or mistake in any material regard was employed by any one or occurred in order that such license should be conferred. Every license, or if lost a copy thereof legally certified so as to be admissible as evidence, or a duly attested transcript of the record of its conferment, shall, before registering, be exhibited to the county clerk, who, only in case it was issued or indorsed as a license under seal by the regents, shall indorse or stamp on it the date and his name preceded by the words: "Registered as authority to practice medicine in the clerk's office of county." The clerk shall thereupon give to every physician so registered a transcript of the entries in the register with a certificate, under seal that he has filed the prescribed affidavit. The licensee shall pay to the county clerk a total fee of one dollar for registration, affidavit and certificate. The regents shall have power at any and all times to inquire into the identity of any person claiming to be a licensed or registered physician and after due service of notice in writing, require him to make reasonable proof, satisfactory to them, that he is the person licensed to practice medicine under the license by virtue of which he claims the privilege of this act. When the regents find that a person claiming to be a physician, licensed under this act, is not in fact the person to whom the license was issued, they shall reduce their findings to writing and file them in the office of the clerk of the county in which said person resides or practices medicine. Said certificate shall be prima facie evidence that the person mentioned therein is falsely impersonating a prac-

tioner or a former practitioner of a like or different name. The regents may revoke the license of a practitioner of medicine, or annul his registration, or do both, in any of the following cases:

(a) A practitioner of medicine who is guilty of any fraud or deceit in his practice, or who is guilty of a crime or misdemeanor, or who is guilty of any fraud or deceit by which he was admitted to practice; or

(b) Is an habitual drunkard or habitually addicted to the use of morphine, opium, cocaine, or other drugs having a similar effect; or

(c) Who undertakes or engages in any manner, or by any ways or means whatsoever, to procure or perform any criminal abortion as the same is defined by section two hundred and ninety-four of the penal code; or

(d) Who offers or undertakes by any manner or means to violate any of the provisions of section three hundred and eighteen of the penal code.

(e) Proceedings for revocation of a license or the annulment of registration shall be begun by filing a written charge or charges against the accused. These charges may be preferred by any person or corporation, or the regents may on their own motion direct the executive officer of the board of regents to prefer said charges. Said charges shall be filed with the executive officer of the board of regents, and a copy thereof filed with the secretary of the board of medical examiners. The board of medical examiners, when charges are preferred, shall designate three of their number as a committee to hear and determine said charges. A time and place for the hearing of said charges shall be fixed by said committee as soon as convenient, and a copy of the charges, together with a notice of the time and place when they will be heard and determined, shall be served upon the accused or his counsel, at least ten days before the date actually fixed for said hearing. Where personal service or service upon counsel cannot be effected, and such fact is certified on oath by any person duly authorized to make legal service, the regents shall cause to be published for at least seven times, for at least twenty days prior to the hearing, in two daily papers in the county in which the physician was last known to practice, a notice to the effect that at a definite time and place a hearing will be had for the purpose of hearing charges against the physician upon an application to revoke his license. At said hearing the accused shall have the right to cross-examine the witnesses against him and to produce witnesses in his defense, and to appear personally or by counsel. The said committee shall make a written report of its findings and recommendations, to be signed by all its members, and the same shall be forthwith transmitted to the executive officer of the board of regents. If the said committee shall unanimously find that said charges, or any of them, are sustained, and shall unanimously recommend that the license of the accused be revoked or his registration be annulled, the regents may thereupon in their discretion, revoke said license or annul said registration or do both. If the regents shall annul such registration, they shall forthwith transmit to the clerk of the county or counties in which said accused is registered as a physician, a certificate under their seal certifying that such registration has been annulled, and said clerk shall, upon receipt of said certificate, file the same and forthwith mark said registration "Annulled." Any person who shall practice medicine after his registration has been marked "An-

nulled" shall be deemed to have practiced medicine without registration. Where the license of any person has been revoked, or his registration has been annulled as herein provided, the regents may, after the expiration of one year, entertain an application for a new license, in like manner as original applications for licenses are entertained; and upon such new applications they may, in their discretion, exempt the applicant from the necessity of undergoing any examination.

Sec. 12. *Registry in another county.*—A practicing physician having registered a lawful authority to practice medicine in one county, and removing such practice or part thereof to another county, or regularly engaging in practice or opening an office in another county, shall show or send by registered mail to the clerk of such other county his certificate of registration. If such certificate clearly shows that the original registration was of an authority issued under seal by the regents, or if the certificate itself is endorsed by the regents as entitled to registration, the clerk shall thereupon register the applicant in the latter county, on receipt of a fee of twenty-five cents, and shall stamp or endorse on such certificate, the date and his name preceded by the words, "Registered also in.....county," and return the certificate to the applicant.

Sec. 13. *Certificate presumptive evidence; unauthorized registration and license prohibitive.*—Every unrevoked certificate and endorsement of registry, made as provided in this article, shall be presumptive evidence in all courts and places, that the person named therein is legally registered. Hereafter, no person shall register any authority to practice medicine unless it has been issued or endorsed as a license by the regents. No such registration shall be valid unless the authority registered constituted, at the time of registration, a license under the laws of the state then in force. No diploma or license conferred on a person not actually in attendance at the lectures, instruction and examinations of the schools conferring the same, or not possessed at the time of its conferment of the requirements then demanded of medical students in this state as a condition of their being licensed so to practice, and no registration not in accordance with this article shall be lawful authority to practice medicine, nor shall the degree of doctor of medicine be conferred *causa honoris* or *ad eundem* nor if previously conferred shall it be a qualification for such practice.

Sec. 14. *Construction of this article.*—This article shall not be construed to effect commissioned medical officers serving in the United States army, navy, or marine hospital service, while so commissioned; nor any one while actually serving without salary or professional fees on the resident medical staff of any legally incorporated hospital; or any legally registered dentist exclusively engaged in practicing dentistry; nor any person or manufacturer who mechanically fits or sells lenses, artificial eyes, limbs, or other apparatus or appliances, or is engaged in the mechanical examination of the eyes, for the purpose of constructing or adjusting spectacles, eye glasses and lenses; nor any lawfully qualified physician in other states or counties meeting legally registered physicians in this state in consultation; nor any physician residing on a border of a neighboring state and duly licensed under the laws thereof to practice medicine therein, whose practice extends into this state, and who does not open an office or appoint a place to meet patients or receive calls within this

state; nor any physician duly registered in one county called to attend isolated cases in another county, but not residing or habitually practicing therein; or the furnishing of medical assistance in case of emergency; or the domestic administration of family remedies; or the practice of chiropody; or the practice of the religious tenets of any church. This article shall not be construed to repeal all acts or parts of acts authorizing conferment of any degree in medicine causa honoris or ad eundem or otherwise than on students duly graduated after satisfactory completion of a preliminary medical course not less than that required by this article as a condition of license. It is further provided that any person who shall be actively engaged in the practice of osteopathy in the state of New York on the date of the passage of this act, and who shall present to the board of regents satisfactory evidence that he is a graduate in good standing of a regularly conducted school or college of osteopathy within the United States which at the time of his or her graduation required a course of study of two years or longer, including the subjects of anatomy, physiology, pathology, hygiene, chemistry, obstetrics, diagnosis and the theory and practice of osteopathy, with actual attendance of not less than twenty months, which facts shall be shown by his or her diploma and affidavit, shall upon application and payment of ten dollars be granted, without examination, a license to practice osteopathy, provided application for such license be made within six months after the passage of this act. A license to practice osteopathy shall not permit the holder thereof to administer drugs or perform surgery with the use of instruments. Licenses to practice osteopathy shall be registered in accordance with the provisions of this act, and the word osteopath be included in such registration; and such license shall entitle the holder thereof to the use of the degree D. O., or doctor of osteopathy.

Sec. 15. *Penalties and their collection.*—Any person who, not being then lawfully authorized to practice medicine within this state and so registered according to law, shall practice medicine within this state without lawful registration or in violation of any provision of this article; and any person who shall buy, sell, or fraudulantly obtain any medical diploma, license, record, or registration, or who shall aid or abet such buying, selling, or fraudulantly obtaining, or who shall practice medicine under cover of any medical diploma, license, record or registration illegally obtained, or signed, or issued unlawfully or under fraudulent representations, or mistake of fact in a material regard, or who, after conviction of a felony, shall attempt to practice medicine, or shall so practice, and any person who shall in connection with his name use any designation tending to imply or designate him as a practitioner of medicine within the meaning of this act without having registered in accordance therewith, or any person who shall practice medicine or advertise to practice medicine under a name other than his own, or any person not a registered physician who shall advertise to practice medicine, shall be guilty of a misdemeanor. Any person who shall practice medicine under a false or assumed name, or who shall falsely personate another practitioner or former practitioner of a like or different name, shall be guilty of a felony. When any prosecution under this act, or under sections three hundred and eighteen, two hundred and ninety-four, two

hundred and ninety-five, two hundred and ninety-seven, four hundred and five-b of the penal code, and any amendments thereto, is made on the complaint of any incorporated medical society of the state, or any county medical society entitled to representation in a state society, any fines collected shall be paid to the society making the complaint, and any excess of the amount of fines so paid over the expense incurred by the said society in enforcing the medical laws of this state, shall be paid at the end of the year to the county treasurer.

Sec. 16. Article eight of chapter six hundred and sixty-one of the laws of eighteen hundred and ninety-three, chapter three hundred and ninety-eight of the laws of eighteen hundred and ninety-five, chapter six hundred and thirty-six of the laws of eighteen hundred and ninety-five, chapter one hundred and eleven of the laws of eighteen hundred and ninety-six, chapter six hundred and forty-six of the laws of nineteen hundred and one, and chapter two hundred and forty-three of the laws of nineteen hundred and two are hereby repealed.

Sec. 17. This act shall take effect immediately.

GOVERNOR STUART'S VETO MESSAGE. THE OSTEOPATHIC BILL.

Commonwealth of Pennsylvania,
Executive Chamber, Harrisburg, May 1, 1907.

*To the Honorable, the House of Representatives
of the Commonwealth of Pennsylvania:*

Gentlemen: I herewith return, without my approval, House Bill, No. 211, entitled "An act to amend sections one, five, six, eight, ten, eleven, twelve, thirteen, fourteen, and sixteen, and to supplement an act, entitled 'An act to establish a Medical Council and Three State Boards of Medical Examiners, to define the powers and duties of said medical council and said State board of medical examiners, to provide for the examination and licensing of practitioners of medicine and surgery, to further regulate the practice of medicine and surgery, and to make an appropriation for the medical council,' approved May eighteenth, one thousand eight hundred and ninety-three, by providing for an additional member on the State Medical Council and an additional State board of examiners to be known as the State Board of Osteopathic Examiners, for the licensing of osteopaths, changing the method of examination, providing for a preliminary education, requiring the applicant for license to take a course of four years in a medical or osteopathic college, prescribing the penalty for violations, fixing the appropriation to the medical council and providing for the revocation and suspension of license upon certain conditions."

This bill is an amended supplement to the act of eighteenth of May, one thousand eight hundred and ninety-three, (pamphlet laws, 94), the preamble of which is as follows:

Whereas, The safety of the public is endangered by incompetent physicians and surgeons, and due regard for public health and the preservation of human life demands that none but competent and properly qualified physicians and surgeons shall be allowed to practice their profession—"

It is now proposed by this bill to provide for an additional member of the State Medical Council and an additional State Board of Examiners, to be known as the State Board of Osteopathic Examiners. The general scope of the bill is to add

to the act designed to protect the public from the dangers incident to the practice of medicine and surgery in incompetent practitioners, by licensing such as are, after rigid examination, found to be competent, somewhat similar provisions for licensing practitioners of the science of osteopathy.

That the skillful practice of osteopathy has benefited the afflicted and alleviated human suffering in many instances is an established fact; that osteopathy may be practiced by its professors without the violation upon their part of the said act, of one thousand eight hundred and ninety-three, regulating the practice of medicine and surgery, has also been established by judicial decisions. No legislation, therefore, is necessary to permit osteopaths to practice their profession. There is a broad and clearly defined distinction between practicing medicine and surgery and practicing osteopathy. It was stated by the representative of the osteopaths at the hearing accorded the opponents and sponsors of this bill, that osteopaths do not claim to be medicine or drug physicians. Carrying out this distinction, the bill provides for two kinds of licenses, and and specifies that,

"Those licensed as practitioners of osteopathy, under the terms of this act, shall not be permitted to hold themselves out as licensees of medicine under the terms of this act."

The State is not concerned with any controversy between the different schools or sects of those who practice the art of healing, as to the merits or demerits of their respective schools; but it is interested in protecting the public from incompetent practitioners of every school or sect. Whether classifying osteopaths, who are not physicians or surgeons in the ordinary acceptance of these words, with physicians and surgeons, in legislation originally designed to be applicable only to physicians and surgeons, would afford the desired protection to the public, is extremely doubtful.

For the protection of the public the law requires a high degree of education and professional qualifications on the part of the physicians and surgeons, but this bill provides that, "Nothing contained in this act shall be construed to affect the right to practice osteopathy on the part of any one who has been actively engaged in the practice of the same for five continuous and consecutive years prior to the approval of this act," and that any such person shall be entitled to registration upon making affidavit to such continuous practice. Again, only those registered physicians, who have practiced medicine and surgery in this State, for a period of ten years, are eligible for appointment to the present boards of examiners, while, under the provisions of this bill, graduate osteopaths who have practiced but four years, would be eligible for appointment to the proposed Board of Osteopathic Examiners. The regulation of the practice of osteopathy is desirable for the protection of the public, but in my judgment it should be provided for in some other manner than by attempting to embody such regulation in legislation having for its primary purpose the regulation of the practice of medicine and surgery.

For these reasons the bill is not approved.

EDWIN S. STUART.

THE EDUCATION OF CHILDREN.

The Superiority of the Playground to the Schoolroom.—Dr. Woods Hutchinson of New York City, at the Annual Meeting of the Amer. Acad. of Med., said that he thought the superiority of the playground over the schoolroom in the physical development of the child needed little proof. In addition to the disadvantages of the overheated air of the schoolroom, inadequate ventilation, and improper light, the child was denied his divine right to wriggle. Children kept out of school for half the day were said to make better progress in their studies alone, to say nothing of the improved physical and mental condition. That the child would never learn the classics in the school of play was regarded one of its chief advantages. These, the author said, represented a relic of barbarism, of caste education, of culture separating its possessor from the rest of his kind, the aim of which was selfish in self-culture and personal exaltation. The aim of modern scientific education was rather effectiveness for helpfulness to others. The playground was claimed to be equally effective on the moral side by checking and controlling the child's impulses and interests through contact with his fellows. The best morality in the world he thought was to be acquired on the playground. Justice and fearlessness rather than charity were said to be demanded by the new code.

Dr. Winfield S. Hall thought many of the principles expressed by Dr. Hutchinson were recognized by the present day educators. He recalled the case of a girl of fourteen brought up on the plains who had shown remarkable development after being in school one year. This larger ability to study was also marked in boys able to attend school for only three months in the year. Even in the playground, however, he would have the attention of the children riveted as an aid in their mental development.

Dr. J. W. Grosvenor of Buffalo agreed in part with Dr. Hutchinson, but was entirely opposed to the idea that a child should follow his own sweet will. Because of his belief in the matter of heredity concerning the mental and moral characteristics of the child he said education should be largely individual. Even the play of the child should be superintended by an experienced person. The study of the classics he regarded of advantage in the training of the mind, especially of the memory. He agreed with Dr. Hutchinson, however, that too much time was spent in the schoolroom.

Dr. S. A. Knopf of New York City would not have children enter school before the seventh or eighth year and would have the first few years made up of half or three-quarters play. He suggested the advantage of having singing and recitations out of doors, and in this connection referred to the custom in the German army of allowing the soldiers to sing while on march. He thought physicians should urge the establishing of roof gardens in school houses when land was not available.

Dr. Ernest B. Hoag of Pasadena spoke of the admirable results in education obtained at the Theosophists' colony at Point Loma, California. The children were not in school more than two hours a day. They were divided into groups, each group having a teacher. Their play was so superintended as to be instructive. Hygiene was taught by making it a part of their life. Dr. Hoag was careful to state that while admiring

the methods of education at the colony he was not a theosophist.

Dr. Emma B. Culbertson of Boston agreed with Dr. Hutchinson in protesting against the faddism of the modern schools, feeling that they were going to great extremes. She thought the great trouble before the public schools lay in the overindulgent method of the kindergarten. To her mind a kindergarten child was a child spoiled to study. She felt strongly that the study of Latin was a necessary foundation for the study of all other languages and a necessity for an accurate application of language to the expression of ideas. Personally she felt that she was a better physician, a better woman for this study.

Dr. M. G. Motter of Washington, D. C., was glad to hear the defence of the classics which he thought an absolute necessity in the preliminary training of physicians. In the present day system of public school education he felt there was too much instruction and not enough education.

Dr. Leartus Connor of Detroit spoke in defence of the study of Latin and Greek.

Dr. Edward Jackson of Denver said that the great supremacy of the playground over the schoolroom lay in the great value of spontaneous action on the part of the child. Illustrative of this he contrasted spontaneous muscular movement to movement in obedience to external influence. There might be, however, schools and teachers capable of giving all the advantage of that spontaneous effort by which the child is benefited in the playground. A principle of importance in the education of a child was the recognition of a certain need or the existence of a special aptitude, either natural, or acquired from teachers who had presented attractively studies in which they themselves were especially proficient. As in the girl of fourteen mentioned by Dr. Hall, she acquired easily that which she saw in others and desired. He felt that the importance of the child doing what he wanted to do should be recognized.

Dr. Thomas D. Davis of Pittsburg, who had been for more than twenty-five years on one of the school boards which he said were berated so continually, was anxious for practical information from any source. He had tried to carry out the co-called advanced ideas with the result that the school children were older when prepared for the high school than formerly. He took strong exception to Dr. Jackson's idea that children should be educated according to their natural bent, believing that if they were trained in the line of least resistance they would be narrow-minded. If it were found that the playground would give the child a better all-round preparation for life than the schoolroom he thought it well to get rid of the schoolroom.

Dr. Donly C. Hawley of Burlington, Vt., thought it true that to-day children were educated too much—not too well. He believed it better for the child to enter school later, probably at ten years, and thought the time would come when half-day sessions only would be held. Those not taking up a professional life he thought should not remain in school so many years as was the present custom. All children he thought should not study the classics, but agreed with Dr. Culbertson that the study brought the scholar in touch with the best thoughts of the best minds. Mathematics should be especially taught to the boy or girl who did not like them. Such child not having a logical mind would thus be developed in this trend of thought. He regarded the playground important in the child's education in put-

ting him in touch with nature and with his kind, but did not believe in the extreme degree of the principle as presented by the author. He regarded it rather as a valuable accessory to the school.

Dr. Hutchinson, in closing, referred to instances in which the children kept out of school for two or three years or kept on half time had made the same progress as those in constant attendance. He asserted that the best pedagogical practice was in favor of giving the children an opportunity to grow up according to their natural tendencies. For those who liked the classics he would favor their study, but he would not compel every student to come up against this Chinese wall. He acknowledged the value of the study in its bearing upon the history of the ancients, but emphasized his belief that it tended to keep alive the desire for education, not for the sake of usefulness to others, but for the sake of self-culture and a certain air of distinction, an aim in his opinion purely selfish and opposed to the aim of science in its service to humanity.—*Reported in the N. Y. Med. Record.*

THE MEDICAL INSPECTION OF SCHOOL CHILDREN.

Of the utmost importance, not only to the present condition of our public health, but also to the future welfare of our citizens, is the question of medical inspection of school children, which is at present exciting a good deal of comment. The future of our country and race lies more in the efficiency of the public school than in any other single factor. A systematic scheme of medical inspection has not yet been put into practice in this country, and is only in its youth in England. Germany, however, has long recognized the value of such inspection, and has employed a corps of medical men to examine school children for some years. President Eliot, of Harvard University, is responsible for the statement that, in the primary grade of school life in this country, forty per cent. of the children are beyond the normal age for the grade in which they are working, and twenty to forty per cent. in grammar schools are over the maximum age for that grade. We need hardly state that mental progress is retarded, and mental dullness of marked degree often induced by errors of vision, deficiency of hearing and the presence of adenoids. In the superficial examinations made so far in this country, some remarkable statistics have been compiled. In Philadelphia sixty-four per cent. of incorrigible children presented marked physical defects. In New York, where seventy-five thousand school children were examined during the last year, twenty-four thousand showed defective hearing, and fifty thousand nine hundred, had these and other defects that required medical attention. Lovett states, "it is of little use to know that twenty-six per cent. of school children have lateral curvative of the spine, and that it progresses during school life from about eighteen per cent. in the lower grades to thirty-three per cent. in the higher grades, unless we do something about it in the way of providing proper school furniture.

Statistics need not be piled up in order to convince. Though the movement in favor of school inspection by competent medical men is a recent one, it is generally recognized as a reform of great importance. Teachers, school principals and school boards should recognize to the full the significance of the recently developed statistics. Pub-

licity, which is the best means at our disposal for creating or changing public sentiment, should be fully employed in behalf of this movement. The teachers in public schools should be taught the simple rules of hygiene, and the parents of the pupils should not regard the medical examination of their children, or the criticism of their hygienic condition as affronts, but should be taught to coöperate with both the teachers and the medical examiners, and should be thoroughly impressed with the importance of the fact that a properly formulated medical inspection of schools and school children has an element of strong preventive aspect, and would be an assurance and a protection of the health of their children.—*Exchange*.

COUNTY MEDICAL SOCIETIES.

Excuses for Non-Attendance.

Why do you not attend the meetings of your county society? This question has been asked of a number of the submerged element in our profession, some of whom are members but are never present, while others had never become interested in our local society.

A majority, perhaps, responded: "Too busy. I just can't spare the time to attend societies and read journals. My patients demand all my time." We wonder if it ever occurred to these men that Gross, McDowell and Yandell never missed a meeting of their local, national or state societies. The men who use this excuse are usually too busy pottering around their daily calls, poorly educated, with too little practical knowledge to know how to direct their patients for an extra day. These men usually and naturally receive small fees for the exercise of their small capacities, and it means a real loss to miss the two or three paid calls in a day. The remedy seems easy. Read, study and mingle with your fellows so you will really be worth something to your patients and you will soon find that the demand for your services will increase and that this will be accompanied by a proportionate increase in your income. Of course you will feel a hesitancy about discussing subjects at your first few meetings, but this will soon pass away, and if you will try it a few months you will learn of how much real, every-day value is medical society work. Consider all the doctors you know, and everyone who has made an unusual *professional* success has been a society worker.

Another class are the men who have already arrived at success, and, forgetful of the ladder by which they climbed, now neglect their county societies to revel in the higher flights of specialism. This class deserves no sympathy. They are the ones who write numerous text books sufficiently clear to enable the careful reader to discover that most every patient needs the special care of the author. These men would fill the columns of the journals, and they do of the lesser and lower class of nostrum-supported ones, with their beautiful, too highly scientific papers—most of them general or special pleas as to why this especial author should do your consultation work on patients that are able to pay. This class deserves no sympathy. View with suspicion the "great" man whose voice is never quoted in his county society. If he is unwilling to lend his voice and knowledge to his local confreres, it is usually because the former has been cultivated at the expense of the latter. If he is too wise for his local profession, and prefers to work in larger—and distant—cir-

cles, he fails to deserve the support of his fellows.

Still another division of the profession state frankly that their medical education was too limited for them to be able to interest themselves in scientific discussions. These men are really to be pitied. Poorly prepared for entrance to medical colleges which had practically no facilities for real work, they are terribly handicapped in the battle of life. Sometimes they succeed in fooling many people—ignorant like themselves—for a long time, but they are afraid to attend medical meetings for fear they will expose their ignorance. These men need our help and encouragement, not our reproach. They are treating helpless sick people, and our medical societies do no greater good than in inducing such men to attend and then inducting them into the post-graduate work which will do so much to help them be better—more useful physicians.

A smaller and a lower class are those who actually oppose medical organization and remain away so they may tell their colleagues' patrons: "While ——— and ——— are attending medical meetings and conspiring to raise our medical bills and put you on the black list and to run medical politics, I am staying with my poor sick friends attending to my duty. If your doctor is away send for me." These contemptible practitioners of the "black art" school never succeed in elevating themselves by their own boot-straps out of the mire of their conceit and mischievousness. They may flourish for a time in a small way, but their lack of progress, their envyings and their back-bitings will redound sooner or later to their discredit and their shame. "Let the fool alone in his folly." Medical societies nor other instrumentalities of civilization and improvement can better such men. Happily they are not immortal, and when they vex you it is well to remember that when they die their deeds will die with them, while every good deed you do your fellow-men keeps multiplying through eternity. "As ye sow, so shall ye reap."—*Editorial Kentucky Medical Journal*.

ACTIVE COUNTY SOCIETY PRESIDENT.

Dr. M. V. Ball, president of the Warren County (Pa.) Medical Society, has addressed the following letter to his members:

You have honored me with the office of president of your county medical society.

Will you not resolve with me to give a little more of your thought and time to developing the work of this organization?

Will you not try to take part in the program?

Will you not report your interesting cases?

Then I would ask you to make these resolves for yourselves.

Resolve to be charitable to the faults and weaknesses of your colleagues.

If they are guilty of a serious wrong doing or have injured you, be manly, do not stab them in the back but bring the matter before the censors, let the accused be heard in his own defense, and if the fault is one unworthy of a member of a profession like ours, I promise you it will not go unpunished.

Resolve to make no compromise with fraud or charlatanism; refuse to put your approval to anything that smacks of secrecy or deception; do not lend your aid to journals that foster humbug and falsehoods in their advertisements; do not prescribe or encourage the use of preparations of whose ingredients you are ignorant; avoid the

use of patented drugs as far as possible.

Resolve to take an active part in the public affairs of your community, thus making your special knowledge of value to your fellow-citizens, and your opinion worthy of recognition.

Resolve to keep abreast with the latest results of medical research and discovery by diligent reading, attendance at clinics and medical meetings and aid in the pursuit of knowledge by careful observation and recording of facts in your own experience.

Resolve to make the Warren County Medical Society a power for good in the community, the district and the State.—*Penn. Med. Journal*.

(This is excellent advice and we commend it as worthy the careful consideration and adoption of the members of our county societies.—*Editor*.)

REPORT ON THE TYPHOID FEVER EPIDEMIC IN THE STATE HOSPITAL, TRENTON.

By Henry Mitchell, M. D., Secretary of the State Board of Health.

To the Board of Health of the State of New Jersey:

GENTLEMEN—Twenty-eight days have now elapsed since a new case of typhoid fever has been reported from the State Hospital, Trenton, and we may therefore conclude that the epidemic which recently prevailed in that institution has finally ceased.

To briefly review the important facts having relation to this outbreak it may be stated that the first case occurred April 8, 1907, in the person of an inmate of the hospital, located in the west wing of the building, who probably contracted the disease in the city of Trenton. Subsequent cases occurred in the same wing, and up to August 13, 80 cases had appeared in the hospital, with 16 deaths. All of these cases were located in the main building of the institution and no cases occurred in the Annex, notwithstanding that more than 400 of the inmates of the institution are cared for in that building. Twenty-three employees and other residents in dwellings on the hospital premises were affected with the disease. Investigations concerning the food supply, including milk and water, were negative, except that colon bacilli were found in the water of the spring from which a portion of the water provided for the hospital premises was obtained. Suspicion was at first directed to the water of this spring as the medium through which the infection was spread, but in the light of later developments it now appears improbable that the spring water had any influence whatever in conveying the infection, and we are led to the final conclusion that the disease was transmitted directly from patient to patient and through the agency of utensils and food infected within the building.

This conclusion is justified for the following reasons:

(1) The disease first appeared in the west wing of the main building and spread to other inmates in this wing, and as facilities were not provided for the isolation of convalescents the infection was communicable by them to other susceptible inmates.

(2) The spoons, forks, cups, etc., used in the dining rooms were washed by the insane inmates, without boiling, and, in the course of the epidemic every utensil in the building probably

became infected, thereby exposing the food which entered the building to infection as soon as it was received.

(3) The filthy habits of many of the insane inmates of the hospital probably caused infected discharges to be generally distributed in the bath room, upon the furniture, doorknobs and other surfaces touched by the hands of the infected persons.

(4) From the west wing the infection was carried to other portions of the main building, but as above stated not a single case occurred in the Annex, indicating that the infection was not conveyed by milk or water, for the supply of both of these articles was from the same sources for both buildings. The water supply for all of the buildings on the hospital premises was taken from the same piping system, and in the stand-pipe, located near the Annex, the water which was pumped into the mains from the spring and from the wells was undoubtedly often thoroughly mixed before distribution to the various branches and service lines.

(5) Inquiry has shown that communication between the infected kitchens of the main building and the dwellings of employees, where cases of typhoid fever occurred, was frequent.

Restatement.

1. Typhoid fever was brought to the State Hospital, Trenton, by an inmate who was admitted February 16, 1907, the diagnosis being made April 8. This patient was located in the west wing.

2. The room-mate of the first patient contracted the disease, and also numerous other inmates in the same wing.

3. These persons were not isolated during their convalescence and new cases continued to appear in the west wing and the disease was undoubtedly spread from patient to patient.

4. The disease did not attack the inmates located in the Annex because they were not brought into contact with infected persons.

5. The disease finally subsided when all susceptible persons who were exposed to the infection had suffered an attack.

Very respectfully,

HENRY MITCHELL, *Secretary*.

Trenton, N. J., Sept. 11, 1907.

Mosquito Extermination in New Jersey.—

As a result of the ditching that has been done in the Hackensack Meadows, the low lands between Newark and Elizabeth, and other marshes in the neighborhood, together with the oiling of stagnant pools, the mosquito pest has been reduced by what is estimated as at least three-quarters.

Free Milk in Jersey City.—The Health Board of Jersey City has decided to establish a depot in the basement of the City Hall for the free distribution of pasteurized milk. Poor women presenting prescriptions from a physician for pasteurized milk for infant feeding will receive it without charge. It may also be obtained without a prescription by paying the cost of the bottles. The free dispensaries maintained at drug stores for several summers will be abandoned and the dispensaries' appropriation will be used to support the free milk depot. Substations will be opened in the basements of public school buildings.

THE JOURNAL

OF THE

Medical Society of New Jersey.

OCTOBER, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

In another column will be found the report on the typhoid fever epidemic in the State Hospital at Trenton, to the State Board of Health by its Secretary—Dr. Henry Mitchell. It is a clear, concise and logical presentation of the subject, and we believe it will be generally accepted as setting forth the causation and methods of spread of the epidemic.

We believe that a much larger number than usual of our members have enjoyed seasons of needed rest during the past two months. We presume that nearly all our county society secretaries and reporters have been away from home on their vacations, as we have received no reports from them. We congratulate them and indulge the hope that, with strength renewed, they will impart new life to their county societies and that the JOURNAL may be kept busy, and made more interesting, in reporting their efforts to advance the profession and win public confidence and esteem. The editor wishes an early report of every meeting held, and any information of interest to the profession occurring within their respective counties, and we shall endeavor to make the JOURNAL more helpful than ever to these societies. We call attention to two articles in this issue—Active County Society President, and County Medical Societies.

HOSPITALS AND THEIR SUPPORT.

We were able to get five days of rest and travel, or rather travel and change of activity, for we were “on the go” most of the time. One thing worthy of mention in the JOURNAL we would report—our visits to the State Hospitals at Scranton and Williamsport, Pa., through the kindness of Dr. Shields of Scranton and Dr. Spader, resident physician of the Williamsport hospital. Both are model hospitals; well located with spacious grounds, splendidly constructed and equipped; each accommodating about 150 patients; well managed, separate wards for nearly all branches of practice, where we saw nearly every form of disease, not excepting the ubiquitous typhoid fever (12 cases in each hospital). In the former hospital we saw the extensive corridors, which were crowded with beds during the late typhoid epidemic. The fact concerning these hospitals which most impressed us, and which has led us to report this trip, is that these hospitals are largely supported by the State—the appropriations being exceedingly liberal. At first thought we were inclined to favor the State aid method of sustaining these hospitals and to ask—Would it not be well for New Jersey to follow Pennsylvania’s example? On reflection we are led to question seriously the wisdom of it, when we consider the danger of political manipulation and graft; its tendency to lessen the generous impulses of the charitably inclined; to encourage undue extravagance and possibly to endanger the safety of the patients by the selection of members of the medical staff because of their “political pull” rather than their professional ability.

We believe that recent events in our State concerning other institutions present a strong argument against the Pennsylvania method of hospital support.

We were pleased to receive a letter from Dr. Joseph Tomlinson, of Bridgeton, in reference to the editorial in our September issue—Do Our Educational Methods Need Correction? in which he says: “Your edi-

torial is most timely. It is needless to say I heartily endorse all you have said." A communication since received from him, briefly discussing the subject, will be found in another column which is worthy the careful consideration of our members and should lead to some definite action by our State Society. We know of no member of our Society more competent to prepare a paper on this subject for presentation at our next Annual Meeting, and we hope he may be persuaded to do so. He has given the subject close study, has read one excellent paper before the State Sanitary Association and subsequently presented a report replete with valuable points and suggestions.

THE WARFARE AGAINST TUBERCULOSIS.

In another part of this JOURNAL will be found a brief paper by Dr. Irwin H. Hance, of Lakewood, read at the last annual meeting of the New Jersey Sanitary Association, on "Sanatoria, Their Advantages and Limitations." It is worthy of careful reading at this time when the attention of the people is being called to the importance of waging warfare against this hitherto most deadly of diseases, when the remedial and preventive measures are being discussed and local associations are being organized to lessen its ravages and finally wipe it out, as it is possible to do when properly and persistently fought. It is encouraging to know that already in many large cities of our country, as also in England, since setting in motion properly directed efforts the death rate has been decreased about one-half. We believe that careful judgment is needed in deciding as to the best quarters for the reception, care and treatment of patients, as many points need consideration. The day camp would in some places be advisable to begin with, the sanatorium in other places, and where intelligent public sentiment is sufficiently aroused to provide sufficient funds, through municipal support or private gifts or both, a sanatorium for the incipient cases and a hospital or home for advanced cases would be advisable. We believe that in our smaller

cities and towns that modest, inexpensive, though properly constructed and equipped buildings, should mark the inception of this part of relief work, and that additions should be made as popular interest in the work and funds increase and the number of cases require. While these institutions should be under the general management of a competent board of prominent citizens the medical care of patients should be in the hands of the physicians of the city under rules of treatment adopted by them, every physician being permitted to send his tuberculosis patients to the institution and treat them, as far as the institution's capacity and established rules permitted, except in cases where a specialist is in charge as resident physician.

In the fight against tuberculosis we have referred to the day camp, the sanatorium, etc., but there is needed much preliminary work before their selection and construction should be undertaken. The great need in adopting even well directed preventive and remedial measures is the education of the public as to the necessity for and the possibilities and conditions of success in these efforts. That education should be carefully, methodically and thoroughly carried on. The people should be taken into our—the physicians'—confidence and be given exact facts without any exaggeration—the real facts are bad enough. As in smallpox, diphtheria, etc., often half a dozen cases are magnified into a hundred, frightening the public, doing injustice to the health authorities and damaging the city, so in tuberculosis there is a tendency to exaggerate. Some one has stated in a medical paper that tuberculous disease in some form exists in one out of every ten of the population, the lay press will make it one case of pulmonary consumption in every ten of the population, and even some doctors injudiciously circulate it. It is not true. One in a hundred would be a large estimate, and even that is a sad confession to make in this day of scientific medical progress and especially of great advance in preventive medicine.

The organization of local organizations, now being carried on under the supervision of the New Jersey Anti-Tuberculosis Association, we believe, promises the best results in the education of the public concerning this disease, and these local associations should embrace as large a percentage of the population as possible—intelligent and ignorant, rich and poor alike, as a *sine qua non* of the highest success. There should be a nominal fee—of small amount, to cover expenses, including the purchase and circulation of literature on the subject, which is very important, popular talks should be given to the members and others. The field should be carefully studied as to the number and location of cases, the stages of the disease of the cases as far as possible to ascertain, the condition of the homes of the patients and their surroundings, and these facts should be reported and tabulated; educate the afflicted how to care for themselves as to eating, sleeping, the necessity of sunshine, fresh air; especially to avoid spitting on floor, etc., cups being provided for the sputum. The district nurse employed to supervise and see that these necessary requirements are carried out, and to assist the sick and protect the well from becoming afflicted, is a most excellent plan which has worked admirably in Orange and elsewhere, and has just been started by the D. A. R. at New Brunswick, though not specially for the tuberculosis campaign.

This work should be carried on with good judgment and unwearying persistence by persons competent to advise. The old adage—"a little learning is a dangerous thing"—would then not apply here; undue publicity of individual cases that savors of gossip should be scrupulously avoided, the confidence of the sufferers should be secured, their fears and despair as doomed patients, and the family's fears of "taking the disease," as far as possible should be allayed—as the gospel of hope is given them, provided they follow properly prescribed rules.

This preliminary organization work is largely "a labor of love" and should be entirely disinterested and undue prominence

of either physician or layman that savors of advertising should be scrupulously avoided, though in the case of faithful nurses, who give devoted service—in value far beyond the compensation received, commendation is admissible. The consciousness of duty done and the gratitude of patients saved from death and of others for care and relief and kindly interest, and especially the Master's "Well done" will be the earnest workers' best pay.

There are two things we believe should be provided for by law: The notification of tuberculosis cases to the Board of Health (not for publication), and the prevention of over-crowding in homes and tenement or boarding houses, e. g., fifteen or twenty factory employees in a room capable of safely housing four persons, which is not conducive to sanitary conditions, and when such excess is composed of males and females is contributory to the highest immorality.

The Thirty-third Annual Meeting of the New Jersey Sanitary Association

will be held in the Hotel Marlborough-Blenheim, Atlantic City, October 1st and 2d, in connection with the Annual Meeting of the American Public Health Association, which continues its sessions till and including October 4th. President S. K. Dickinson, M. D., Jersey City, of the N. J. S. A., will deliver the annual address and there will be a Symposium on The Ideal Milk of the Future, in the afternoon of October 1st.

Society for the Relief of Widows and Orphans of Medical Men of New Jersey.

The following new members were elected September 23rd: Drs. Frank M. Child, of Hoboken; F. C. Thornlem, of Harrison; Dennis R. McElhinney, Joseph Funk, Samuel Korngut, and Stephen J. Keefe, of Elizabeth.

In pulling on the round ligaments in the Alexander operation, use the fingers rather than instruments; a surer hold is given, one can gauge the proper force to employ more readily, and there is less likelihood of the ligaments tearing.—*Amer. Jour. of Surgery.*

The appearance of emphysema in the tissues about an infected wound, accompanied by fever and escape of bubbles of gas from the wound, should be regarded as very ominous and indicative of gas bacillus infection. Such cases should be treated by extensive incisions.—*Amer. Jour. of Surgery.*

Correspondence.

Do Our Educational Methods Need Correction?

Bridgeton, N. J., September 13, 1907.

To the Editor of the Journal:—

Your editorial in the September issue of the JOURNAL, entitled "Do our Educational Methods Need Correction?" was most timely and deserves the serious consideration of every practitioner in the State.

Any action on the part of the medical profession toward bringing about a reform in our present educational system as it effects the health of school children should be warmly endorsed by every right-minded citizen whether physician or layman.

The medical profession as custodian of the health and physical well-being of the community has a duty to perform in this direction.

This whole subject involves a comprehensive understanding of the real object of primary education.

While we have no right to attempt to speak with the authority of an educator, we have a right to our personal observations and opinions.

It is evident that we have drifted away from the old idea that mental development and discipline is the primary object of a general education.

Materialism in thought and commercialism in action have put their stamp on schools and colleges. The curriculum is accordingly arranged with the idea of fitting the boy or girl, young man or young woman, for money earners.

Hence, for instance, typewriting is taught in the public school, and in the university the last year of the general college course can be combined with the first year in law or medicine.

Here the idea of *mental growth* is lost sight of in *premature specialization*.

We protest against the *amount* of work required of school children but should we not also consider the *kind* of work required of them?

Technical and industrial schools stand on an entirely different basis from the public school and college. The one is quite as necessary as the other but their aims and methods must be essentially different.

It is well for us to inquire who is responsible for this system which *crams*, rather than *develops*.

I have talked with several educators on this subject and the most of them freely admit the evils of our present system. They fix the blame, however, on the public rather than upon the educator.

When the public fully understands that the public school is not a nursery, that it is not a place for defectives, that it is not an industrial or technical school but a gymnasium, for the development of mind and body, when they are brought to understand that the educated man or woman is not necessarily the one possessed of the most facts but rather one who, by reason of mental strength and vigor, can utilize facts to the best advantage, much will have been accomplished toward solving this problem.

Constant agitation of this subject in the medical press, in medical societies and individually in our daily work will do much to stimulate such sentiment.

JOSEPH TOMLINSON.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM NEW JERSEY.

Barbash, Samuel, Atlantic City.
Braddock, Chas. S., Jr., Haddonfield.
Burnett, Hayes J., Montclair.
Carroll, Alexander J., Morris Plains.
Charlesworth, Irving E., Bridgeton.
Cook, Frank B., Laurel Springs.
Corson, Elton S., Bridgeton.
Davis, Henry H., Camden.
Day, S. T., Port Norris.
Dyer, Florence A., Riverton.
Ewens, Arthur E., Atlantic City.
Foley, Michael F., Hoboken.
Freeland, Frank, Maywood.
Howard, J. Edgar, Haddonfield.
Koch, George J. P., Paterson.
Laws, George C., Paulsboro.
Leavett, John F., Camden.
Lee, Bernard R., Atlantic City.
Levy, Julius, Newark.
Maas, Max A., Newark.
Madden, Walter, Trenton.
Marshall, Randolph, Tuckahoe.
McBride, Andrew F., Paterson.
McClendon, Cesar P., Paterson.
Morrison, John B., Newark.
Parry, William C., Hainesport.
Phelan, Edward S., Newark.
Rafferty, Peter J., Red Bank.
Reese, James M., Phillipsburg.
Stahl, Alfred, Newark.
Stanger, P. F., Trenton.
Stewart, James M., Paterson.
Taggart, T. D., Atlantic City.
Taylor, Walter A., Trenton.
Teimer, Theodore, Newark.
Tracy, George T., Beverly.
Wilbur, William L., Trenton.

The next meeting of the Passaic County Medical Society will be held October 8th, and of the Middlesex County Society October 16 at Perth Amboy.

Dr. F. E. Agnew, of the old St. Joseph's Hospital staff, Paterson, has been appointed associate physician of the re-organized staff of the General Hospital in place of Dr. J. H. Banta, deceased.

The new St. Peter's Hospital at New Brunswick will be opened by October 1st for the reception of patients.

The Early Diagnosis of Tubal Pregnancy is the title of a paper read before the Section on Obstetrics and Diseases of Women, at the recent annual meeting of the American Medical Association, by Dr. P. A. Harris, of Paterson. It is printed in the September 28th issue of the A. M. A. Journal.

TUBERCULOSIS SANATORIUM.

Dr. Henry B. Dunham, of Rutland, Mass., Elected Assistant Superintendent.

GLEN GARDNER, Sept. 14.—The Board of Commissioners of the State Tuberculosis Sanatorium at this place met at that institution yesterday and engaged Dr. Henry B. Dunham, of Rutland Tuberculosis Sanatorium, at Rutland, Mass., as assistant superintendent, at a salary of \$1,800 per year. Mr. Dunham has been connected with the Rutland institution for nine years. Mr. Dunham

was one of the unsuccessful candidates for the superintendency some time ago.

The superintendent, Dr. Samuel B. English, of Camden, has been here for several weeks endeavoring to get the institution in readiness for the reception of patients. Dr. English is a graduate of the Jefferson Medical College of Philadelphia, and has been connected with the Cooper Hospital, at Camden, for some time. His salary will be \$3,600 a year. The chief clerk, Clarence Gill, of Trenton, is also at the sanatorium, as are also the day and night engineers, George Conkling, of Somerville, and William Connolly, of this place.

The furniture men are unpacking and placing the furniture in the institution, and every effort is being made for the reception of patients by the latter part of this month.—*The Newark Evening News*.

DENVER BARS THE TUBERCULOUS.

"The city of Denver has ordered that every house tent within the limits of that city shall be at once removed. For many years there have been thousands of these house tents in Denver, a large part of which are occupied by persons afflicted with consumption."—*Milwaukee Sentinel*, March 14, 1907.

That this action of the Denver Common Council will work a serious hardship on a class of people already sufficiently afflicted is not to be denied. As a manifestation of the same phthisiophobia which in California a few years ago sought to exclude these poor sufferers from entering that state, it is to be deplored. It is the same sentiment which a few months ago so bitterly opposed the erection of the Sanatorium of the Milwaukee Association in a neighboring suburb. Unquestionably the effect of the ubiquitous consumptive upon prospective residents of such a city as Denver, and the consequent retardation in the advance of real estate values, must certainly prevent in some measure the growth of the city. As an offset it may well be claimed that many of the brightest people of Colorado are ex-consumptives and that much of the progress of the State is due to the superiority of intellect of people who, but for failing health, would never have made it their residence.

In the interest of fairness, however, it would seem that instead of making the people of any one region bear the burden of this tuberculous horde, it were preferable that, admitting a certain climate to be the best, the home community or the country as a whole should make the necessary reparation. As the various States are now awakening to their duty in regard to the care of their tuberculous, and have come to realize that change of climate is not essential to recovery, we believe the action of the Denver people, while apparently a most cruel and heartless one, may serve to deter all but those able to seek proper sanatorium treatment from going there, and it will also call attention to the need of each State caring for its own cases within its own borders. The country is fortunately becoming aroused to an appreciation of its duty in this regard, and in our own community we must not be called behind the times. Let our consumptives be instructed not to go away from their home State, and they will then not be subjected to the humiliation conveyed by the action of the Rocky Mountain city.

The accommodations afforded the stranger invalid are necessarily meagre enough, but if these

people could be gathered together in a colony with a central control, their cases would progress more favorably and no reasonable objection on the part of the citizens could be made. As stated, however, such forcible colonizing would be scarcely possible to carry out. The people of Colorado cannot be expected to pay the cost of treating the sick of the whole country, but Wisconsin people can be expected to give aid to institutions planned to care for Wisconsin victims of consumption.—*Wisconsin Medical Jour.*

The Bill to Prevent Substitution in Prescription Compounding, which was passed recently by the Legislature of New York State, has been signed by the Governor. This bill amends Section 401 of the penal code relative to certain offenses connected with the dispensing and sale of drugs and medicines. It provides that "Any person who, in putting up any drug, medicine, food, or preparation used in medical practice, or making up any prescription, or filling any order for drugs, medicines, food, or preparation puts any untrue label, stamp, or other designation of contents upon any box, bottle, or other package containing a drug, medicine, food, or preparation used in medical practice, or substitutes or dispenses a different article for or in lieu of any article prescribed, ordered, or demanded, or puts up a greater or less quantity of any ingredient specified in any such prescription, order, or demand than that prescribed, ordered, or demanded, or otherwise deviates from the terms of the prescription, order, or demand by substituting one drug for another, is guilty of a misdemeanor." The bill expressly grants to the druggist the right (except in the case of a physician's prescription) to recommend the purchase of some other article than the one called for, but he must not substitute such article without the knowledge and consent of the purchaser. This bill was introduced in the Senate by Mr. Page at the instance, we understand, of Mr. Charles Roome Parmele. The previous law forbidding substitution, of which this is an amendment, was practically of no force, since it was not possible to punish alteration of the physician's prescription, unless it could be proved that human health or life had been endangered by such alteration. The law went into effect on September 1 of this year.

Contract Practice.—The subject of contract practice has for years been a fruitful source of discussion and yet the practice continues to grow, lowering the dignity of the profession and keeping light the pockets of its members. This absurd and unbusiness-like custom was inaugurated first by railroads, insurance companies and infirmaries, who had the keenness to discern, that some physicians would prostitute the profession by working for little or nothing, so long as they thought they were gaining publicity by it.

The shrewd business man patted the good doctor on the back, told him what a prestige it would give him if he could sign his name as surgeon for the X. Y. Z. R. R., and "if you will do our work we will give you a pass over our lines." The doctor took the bait and felt elevated above his brethren. He seemed never to think that they paid a man for tamping the ties and gave him a pass. The honor (the pass) was just the same in each case, less the money, which went to the section man. The same principle holds in some insurance companies, contracts for outdoor poor, societies, and clubs organized for the purpose of getting

cut rate medical service. Railroads, factories, mills and societies throw these "jobs" at us in about the same manner they would throw a bone to a dog.

Some insurance companies pay five dollars for an ordinary examination, others pay three, others two, for identically the same work and many physicians examine for the different companies, doing the same work, for each one and receiving these different fees. Is this good business? Is it fair? Is it possible that the medical profession has not the stamina to fix its own prices and stand by them, but simply take what is offered by firms and corporations that are able to pay, and charge private patients from two to ten times as much?

No wonder they organize into societies and clubs in order to get our services at the rate the corporations are paying. The time has come to stop contract practice entirely, except where the physician's entire time is taken, or where the fees are based on the usual charge in the locality. The physician's services should come to a cash basis without any rebate for corporations, societies, or persons who will get us patients.

The outdoor poor of this State are treated for almost nothing, not because it is charity but because the contract is let to the lowest bidder.

Here is a spectacle for a learned profession: Class one, railroad surgeons doing the work for a great corporation with little or no pay, except what is called prestige, which in fact is advertising at more than the usual space rate. Class two, insurance examiners examining for several companies, doing the same work for each and meekly taking what these institutions see fit to give. Then class three, "the poor doctor" who treats the poor, not for charity, but because he has bid lower than his competitor. The fourth class, who treat members of a society or club at a rate from two to ten dollars per family per year. As the above is all said to pay because of prestige, the difference between a reasonable fee and the amount paid is the cost of the advertisement.

Classes one and two look with disfavor on the other classes, and yet they are all acting with the same object in view, *i. e.*, trying to build up private practice on free work. There is only one solution to this problem, and that is for all these classes to put their services on a strictly cash basis and charge for their work. While in some cases they may realize more from passes and small contract fees, than their work is worth, that state of affairs will not continue long and in the end they will have paid a very high price for a very little good will.—*From the Ohio State Medical Journal.*

Missouri.—The new medical practice act passed by the last Legislature became effective on June 15th. Under the provisions of this act anyone desiring to practise medicine in this State must have a license from the State Board of Health, and none but graduates of reputable medical colleges may appear before the board of examination for a license to practise.

Punctured wounds about the knee should be treated with the greatest solicitude and attention to aseptis, in order to prevent infection of the joint.—*Amer. Jour. of Surgery.*

Remember that chronic ulcers on the hand are found in brass workers, and that a discontinuance of this occupation is necessary to secure healing.—*Amer. Jour. of Surgery.*

Book Review.

OBSTETRICS—A Text Book for the use of Students and Practitioners. By J. Withridge Williams, Professor of Obstetrics, Johns Hopkins University; Second enlarged and revised edition with sixteen plates and six hundred and sixty-six illustrations. Cloth, \$6.00 net. D. Appleton and Co., New York and London. 1908.

This is a second edition of a popular work, of which in its first edition over 17,000 copies were printed. It contains many new illustrations and has been entirely reset in large type. The sixteen polychrome plates are new and add much to the value of the work. The chapters on the Development of the Ovum, Metabolism of Normal Pregnancy, Vaginal Cæsarian Section, Pubiotomy, and Contractions of the Pelvic Outlet invite special attention. The chapter on the Use of Forceps should be read by all general physicians. The methods of applying the forceps are well described and fully illustrated, especially in posterior positions for the purpose of rotation. We concur emphatically in his final advice "never to apply forceps to save the physician's time, but only when distinctly indicated by the condition of the mother or child."

Medico-Legal.

Conviction of a Christian Scientist.—A Christian Scientist arrested some weeks ago on the charge of having permitted his six-year-old daughter to die of bronchopneumonia without medical attention, was found guilty recently in the Court of Special Sessions of having violated that section of the Penal Code which makes it a misdemeanor for a parent to fail to provide medical attendance for a minor. The sentence may be a fine of \$500, a year's imprisonment, or both. An effort was made in behalf of the prisoner by Justice Deuel to have the trial stopped on the ground that the new law regulating the practice of medicine, which went into effect on May 13, specifically exempts from punishment persons carrying out the practice of the religious tenets of any church. Whether this section of the law does or does not apply to the practice of Christian Science healing has not yet been settled by court decision, but it was decided that it was inoperative in the present case, as the child had died before the law went into effect. It is possible that this provision in the new law will be declared ineffective in regard to minors in any case.

Failure to Report Case of Diphtheria.—Dr. John R. Benton was convicted in the Circuit Court of Queen Anne County, Md., on November 7 on the charge of failure to report a case of diphtheria to the county health officer, Dr. Wm. T. Henry. The case was a criminal appeal by the State from a magistrate's trial, which resulted in a verdict of "not guilty." The magistrate's verdict was a peculiar one. Dr. Benton was charged with the neglect of his duty as a physician. At the magistrate's trial the defense contended that Dr. Benton could not be guilty as a physician, since the patient was his own son and he had called in a fellow-practitioner to attend the boy. Dr. Benton was not therefore responsible as a physician, his duty in the matter of notification being only that of a householder. The magistrate decided that Dr. Benton was guilty as a householder, and fixed the penalty at one dollar and costs. Counsel for

both sides advised the justice that he could not render a verdict on any other charge than that alleged in the writ, which charged Dr. Benton with neglect of his duty as a physician. The magistrate then changed his verdict, declaring Dr. Benton not guilty as a physician. The State appealed from the decision. In the Circuit Court counsel for defense asked to have the case dismissed on the ground that the law of 1906, which allows the State to appeal from a magistrate's decision in a criminal case, is unconstitutional, being contrary to the provision of the Constitution, which says that a man cannot be put in jeopardy twice on the same charge. The court ruled against the defense on this point. Testimony was then taken and the defense was the same as at the magistrate's trial, namely, that Dr. Benton could not be held accountable as a physician in the case of his own child when he had called another physician to act as medical attendant. The court decided that, by calling in another physician, Dr. Benton had not been relieved of his duty to the State in the matter of notification. The magistrate's judgment was therefore reversed, and a verdict of guilty was entered.

Places Maintained by Abortionists Are Public Nuisances.—A decision by the Appellate Division of the Supreme Court written by Judge Lambert which will greatly facilitate the prosecution of abortionists. The defendant had been tried and convicted for maintaining a public nuisance in violation of the penal code, such nuisance being the advertising in the newspapers as follows: "Irregularities, or no charge; longest cases; ladies boarded; 213 East 78th street." She was sentenced to one year in the penitentiary and to pay a fine of \$500. The appeal from this sentence is the basis of Judge Lambert's opinion, from which we quote as follows:

The defendant was charged with maintaining a public nuisance under the provision of sections 385 and 387 of the penal code. An examination of the record shows that there was a fair trial and that the judgment of conviction rests upon sufficient and competent evidence of the facts set forth in the information. The appellant insists that no crime under section 385 of the penal code was stated in the information, and that, therefore, the motions on the opening and closing of the case and in arrest of judgment should have been granted.

The section of the code concerned, so far as it is involved on this appeal, defines a public nuisance to be "a crime against the order and economy of the State, and consists in unlawfully doing an act or omitting to perform a duty which act or omission (1) annoys, injures or endangers the comfort of persons, or (2) offends public decency." The facts set forth in the evidence show that the defendant advertised in the public newspapers of the city of New York to the effect that she cured "irregularities, or no charge; longest cases; ladies boarded; 213 East 78th street;" that she received into the house above indicated a large number of women who were with child, and that she used instruments in producing abortions. There is no attempt to dispute that the defendant made admissions of this character to the witnesses called by the people, but it is urged on the part of the defendant that, as section 294 of the penal code makes abortion a crime of a higher character, there is no jurisdiction in the trial court of the offense charged as a public nuisance.

Great reliance is placed upon the fact in support of this contention, that no adjudicated case has been found in which it has been held that the maintaining of a house for the purpose of practicing the vocation of an abortionist constitutes a nuisance. It is true, as a general proposition, that if a house is so kept that no one outside of its inmates is disturbed, annoyed or corrupted in their morals, it is not in law a disorderly house. The annoyance or corrupting influence must reach beyond the inmates and affect the public peace or morals of the community (¹ Bishop on Criminal Law, section 1051); but the same author says that this doctrine should "not be so applied as to exempt any man from indictment whose house is practically set open to the public, alluring the young and unwary into it for the purpose of their indulging in anything corrupting to their virtue, sobriety or general good morals. If a man would shield himself from indictment when he allows wicked and corrupting practices within his house he should keep his doors, while those practices are carried on, closed to the outer world." (Section 1053.) Again this same learned author says: "If a house is of common resort for the commission of petty offences punishable by fine, it is indictable on this ground, though not otherwise disorderly." (Section 1053.) In the following section he declared that this principle is as old as the law itself; that "a man who holds out inducements for people to congregate and together commit violations of a statute, not only lends the concurrence of his will to their wrongful acts, but also does what most powerfully tends to disrobe the body politic of her virtue and of the drapery of that order which the hand of government has thrown around her." In section 1057 he continues: "To bring a case within the principle the particular acts must be either indictable or in some sense unlawful. Therefore the English court quashed an indictment which charged one with converting a house into a hospital for taking in and delivering lewd, idle and disorderly unmarried women 'who, after their delivery, went away and deserted their children, whereby the children became chargeable to the parish.' 'By what law,' asked Lord Mansfield, 'is it criminal to deliver a woman when she is with a child?' In this there is a clear intimation that the indictment would have been good had it charged that the house was for the crime of abortion, rather than the lawful delivery of children.

Construing the provisions of the penal code under which this charge is made in the light of the common law, it is only a just construction to hold that the broad language used embraces the offenses of the common-law rule in unlawfully doing an act which annoys, injures, endangers the comfort, repose, health or safety of any considerable number of persons or offends public decency. This surely is as broad and inclusive in terms as the rule of the common law, which has been made the subject of the code provisions. At common law it would have been, and under the code provisions it is, a nuisance for a person, by public advertisement, to invite and receive a class of the public to his premises for the purpose of violating the laws of the State, as was done in this case. This, in our opinion, constitutes "crime against the order and economy of the State" by offending "public decency." It is the duty, therefore, of this court, in accord with the law, to sustain this conviction. The offense of abortion is one thing; that of maintaining premises open to the public for the purpose of consummating that

crime is another and separate offense against the peace and good order of the State. It is an inducement to moral laxity and to crime, and is within the letter and spirit of the sections of the penal code here under consideration.

No errors prejudicial to the defendant appearing in the record, the judgment of conviction is affirmed.

Current Medical Literature.

Practical Value of Opsonic Index. Potter, in an article on opsonic index, in reviewing the work which has already been accomplished, considers that it probably will be found of practical use in the following directions:

The great difficulty will arise from the fact, probably, that changes, more or less profound, are indicated by only slight variations of the indices, and that the variation is frequently not far beyond the limits of error in method where opportunities for small errors in technic are numerous.

Some aid in diagnosis may be had by determination of single indices, but before this can be considered a reliable method considerable work must be done to determine the degree of specificity of opsonins. Wright and Reid's work indicates that some diagnostic aid may be obtained by comparison of serum and exudates and by methods of heated and unheated serum.

A wider field of application will probably be in the control of inoculation of vaccines to determine the optimum dosage and regulation of the frequency of the same, but this will be somewhat limited by the clinical difficulties of the method.

A field as yet but little explored, in which it may prove of great use, is in the determination of susceptibility to infection, especially in the inherited susceptibility to tuberculosis.

Perhaps its greatest usefulness will be found in the laboratory, where it may prove to be a rapid method of testing the virulence of organisms and the strength of sera which are dependent on opsonins for their beneficial effects.

Report on Two Hundred Charity Cases of Pulmonary Tuberculosis, Under Sanatorium Treatment at Los Angeles (1903-1907).—Dr. W. Jarvis Barlow, of Los Angeles, in reporting these cases laid emphasis upon the fact that patients in all stages were taken and that 92 per cent. were beyond the first stage. The purpose of the report was to show the possibilities in the treatment of advanced cases. The best working plan had been found to be not to take the poor absolutely free but to make a charge of \$5, which is usually paid from charitable funds. The necessity of making the patients absolutely comfortable physically and mentally was mentioned. The outdoor treatment was described. No tents are used, but cottages, so arranged that the improved patients are practically in the open the whole of the twenty-four hours. From the 60 per cent. of the 200 cases treated, three were Californians; 82 per cent. of the total number had followed indoor occupations. The average gain in weight in all patients was seven pounds and the average loss 5.9 pounds. The weight on discharge was about 4½ pounds gain, because there were included the patients that died at the sanatorium. The best gain in three months of a far advanced case was 22¾ pounds. Of the total 200 cases, 46½ per

cent. of the second and third stages showed a marked improvement. Many of these again became wage earners. The great difficulty in the work of the sanatorium was found to lie in the fact that many of these patients must necessarily return to their wretched surroundings. Such patients kept under proper supervision could reach an arrested condition.

The Organization of Tuberculosis Classes.—Joseph H. Pratt, in the *Boston Med. and Surg. Jour.*, tells of the work of the Emmanuel Church tuberculosis class, which was organized July 1, 1905. Since that time fifty-four consumptives have been members of the class, seventeen have recovered and returned to work, while the disease has been arrested in 75 per cent. of the incipient and moderately advanced cases. Although it has been demonstrated that the class method furnishes an economical and efficient means of treating tuberculosis in the homes of the poor, three important points should be borne in mind if the tuberculosis classes are to be successful: First, they should be directed by physicians familiar with the details of the modern treatment, and the right woman should be selected for the position of friendly visitor. Second, there should be adequate funds for the support of the class. Third, every physician in the community should learn to recognize the disease in its early stages and to refer the case for treatment without delay.

Tuberculous Glands in the Neck.—J. Eddy Blake, Brooklyn, in the *Long Island Medical Journal*, emphasizes the following points: Tuberculosis is tuberculosis, no matter where found or under what conditions. Tuberculous glands in the neck are simply one form of tuberculosis, and are apt to be followed by, if they are not complicated with, other forms of the disease. The occurrence of tuberculous glands in a patient marks that patient as particularly liable to tuberculosis in any form, and the treatment of tuberculous glands in the neck is the treatment of incipient tuberculosis, plus the treatment of the local condition.

Penetration of Skin by Tubercle Bacilli.—Babes, in *Presse Medicale* (Paris), has experimented by rubbing the cultures from tubercle bacilli into the skin of guinea-pigs. In some cases the hair was simply cut away; in others the skin was shaved. The bacilli penetrated the shaved skin with readiness, and in some cases were able also to penetrate the skin when the hair had merely been cut off. The author regards it as probable that tuberculosis may be acquired through patches of diseased skin, although in his experiments there was no evidence of any disease of the skin at the point where the bacilli had entered.—*Jour. A. M. A.*

The After Care of the Consumptive.—In the anti-tuberculosis crusade attention has been devoted to the means of preventing infection, the discussion of laws relating to notification and also to treatment of the tuberculous, particularly the establishment of sanatoria both public and private. There can be no doubt of the value of this movement and of the amount of good which it has already accomplished. There is another feature which has been given comparatively little attention, and that is the after care of the tuberculous. In those who are well to do this problem is not difficult, but for the workingman, and

particularly for the working woman, the problem of how to live after the disease has been arrested is one of paramount importance. Already the public is becoming fairly well educated on the main topics relating to tuberculosis, and the one that has sunk the deepest in the public mind is the feeling that tuberculosis is contagious; hence in the narrower field that is open to the employment of women, which is largely in a sedentary way and in comparatively close contact with others, the problem of occupation is all important. For workmen there is a much wider range of choice. The man who has been employed within doors can obtain work on the farm or in various out of door occupations, but the number of places open to women in out of door work is very limited. To return to the same surroundings under which the disease was contracted is almost certain to mean a recurrence. Discussing this one feature of the anti-tuberculosis crusade shows how the problem of tuberculosis is essentially a sociologic and economic one. With the disease arrested it is highly important to discuss the question of after cure.—*Medicine*.

The Choice of Procedure in Cases of Loose Kidney.—Dr. Robert T. Morris read this paper at the New York Academy of Medicine meeting, Dec. 6, 1906. He said that too much, as well as too little, operating had been done for loose kidney, and asked what should be our choice of procedure in advising patients, and how should they proceed to operate in cases selected for operation. The following classification seemed to him to be a useful one: (1) Loose kidney present, but causing no disturbances. (2) Patients with major or minor psychoses associated with, but not influenced by, the presence of loose kidney. (3) Patients with minor or major psychoses precipitated or intensified by the presence of loose kidneys. (4) Patients with various gastrointestinal reflex disturbances, depending upon the influence of loose kidney through the large sympathetic ganglia. These were the cases that gave the most brilliant results. (5) Patients with direct local mechanical results from the influence of loose kidney. (6) Patients in whom loose kidney was only a part associated with other visceral ptoses. What treatment should be proposed for loose kidney cases? Abdominal supporters first of all in the panptosis cases. Abdominal supporters should be applied in cases where there was any doubt about the part played by a loose kidney. Some of these patients would get so much relief that they would not ask for operation; others were benefited just enough to prove that one must operate. Dr. Morris said he had tried all the type methods excepting the new one proposed by Longyear of shortening the nephrocolic ligament, and this seemed to be disposed of in the combination operation which was now employed. The combination operation included the suture of Goelet, which hung the kidney at just the right point, and the iodoform gauze packing of Senn, which disposed of the retroperitoneal pouch when secondary adhesion occurred after removal of the gauze. Patients were out of bed in two weeks after the operation. The only instruments required were a pair of scissors and a needle. The entire operation of fixation of a loose kidney could be done leisurely in fifteen minutes by the combination operation, and he had fixed both kidneys, completing the work in that length of time. Expeditious work was desirable in any sort of surgical work if it left no detail neglected, because

it left the patient with natural resistance less impaired than it was after putting operations. The combination operation was a speedy one, and it left no detail neglected.—*N. Y. Med. Record*.

A Case of Appendicitis Excited by a Clove, the Appendix Being the Sole Viscus in a Hernial Sac.—W. Hal Barnett and J. W. Scott Macfie report the case of a man, fifty-eight years old, who had suffered for twenty years from a rupture in the right inguinal region, which he controlled by the use of a truss. One week before admission to the hospital he found a swelling, hard and painful, which he was unable to reduce. It grew rapidly larger and painful. There was no visible impulse on coughing. The tumor was hard, elongated, and oval in shape, and about three inches by one inch in size. The mass could be traced from the internal ring down the canal as far as the testicle. At operation a small quantity of clear straw-colored fluid exuded on pricking the sac, and on further opening the mass a rough-walled cavity was laid bare containing a dark red elongated mass. Some purulent material was found, and on lifting up the red mass a clove was discovered lying beneath it. It was then realized that the tumor consisted of a short but very greatly thickened appendix lying in a hernial sac. No other viscus was found in the sac. This case was of interest, first, because of the difficulty in diagnosis, for the tumor felt almost like a malignant mass, and yet it had come down so suddenly; secondly, because of the unusual cause, a clove; and thirdly, in that the appendix, greatly thickened and inflamed, was the sole viscus in the sac.

Discharge of the Appendix Through the Rectum.—Groedel, in *Deutsche medizinische Wochenschrift* (June 27, 1907), describes this remarkable case. The patient was a man of sixty-two years who had been under treatment for some years for diabetes, arteriosclerosis, angina pectoris, and cardiac insufficiency with congestion in the lungs, liver and kidneys. During convalescence from an exacerbation of these conditions he suddenly developed evidences of diffuse peritonitis. Operation seemed inadvisable owing to the patient's general condition, and after twenty-four days of symptomatic treatment the patient died. On the tenth day of the illness about fifteen enteroliths were discharged, and on the sixteenth day the appendix, measuring eight cm. in length, was found in the stools. During the following days quantities of light green pus were mingled with the feces. The author believes that through the pressure of an enterolith at the opening of the appendix a circumscribed patch of gangrene was caused in the cecal wall, accompanied by necrosis of the mesenterium, so that the appendix was enabled to drop back into the cecum and so be discharged with the stools. The tendency to gangrene may have been increased by the diabetes from which the patient was suffering. At a partial autopsy the conditions found seemed to justify such a view.

In operating for loose bodies within the knee joint, do not be satisfied with removing but one body; a careful examination should be made to determine the presence of more, for they are very frequently multiple.—*Amer. Jour. of Surgery*.

The Differential Diagnosis Between Acute Appendicitis and Acute Salpingitis.—The sudden acute onset of abdominal pain with tenderness over the appendix region, but with rigidity of the right rectus low down, is very suggestive of acute salpingitis. The diagnosis is further confirmed if there is high temperature and extremely high leucocyte count (20,000-40,000; polynuclears 80-90 per cent.), even though vaginal examination be negative.—*American Journal of Surgery.*

Intestinal Intussusception.—Coffey, in *Annals of Surgery* (Jan. 1907) thinks the diminished mortality in gastrointestinal surgery is due to the fact that (1) formerly patients were moribund before the condition was diagnosed; (2) the operative technique has greatly improved. The misleading feature in intussusception is that obstruction is sometimes incomplete, and there may be no distention. The most frequent causes of this condition are: (1) A congenital laxness of the structures near the ileocaecal valve; (2) a partial or complete intestinal obstruction by a growth or some form of constriction; (3) the presence of a pedunculated tumor within the lumen of the intestine. Early diagnosis and operation within twenty-four hours offer the best chances of recovery.

Typhoid During Pregnancy.—In the case reported by Rosenfeld (*Centralblatt f. Gynäkologie, Bonn*) the delivery occurred during the prodromal period or stage of the typhoid infection, complicating the diagnosis of the infectious disease very considerably. During the course of the typhoid the cardiac symptoms were so prominent as to lead the observer to suspect that the case really was one of endocarditis due to sepsis from the genital tract. Not until about the tenth day was it possible to obtain a positive Widal test, and then, too, other symptoms of typhoid were manifested. The patient went through a typical attack, but suffered two recurrences. The typhoid did not interfere with the favorable course of the puerperium.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement—August, 1907.

The number of deaths reported to the Bureau of Vital Statistics for the month ending August 15, 1907, was 3232. By ages there were 1066 deaths among infants under one year, 311 deaths of children over one year and under five years, and 686 deaths of persons aged sixty years and over. Infantile diarrhoea caused 639 deaths—an increase of 50 over the corresponding period last year. The deaths from scarlet fever numbered 28. During the previous four months this disease has caused deaths as follows: April 34, May 25, June 24 and July 27. These figures are noticeably higher than those for the preceding seven months, the average for which was 9.85. Diphtheria caused 41 deaths, the average for the previous twelve months having been 56. Cerebro-spinal meningitis (38 deaths) shows an increase above the average. The diseases of the respiratory system show the usual diminution which occurs in summer.

The following figures show the number of certificates of death received in the State Bureau of Vital Statistics during the month ending August 15, 1907, and also the number of deaths reported

from certain selected diseases compared with the average for the previous twelve months. The latter are given in brackets: Typhoid fever, 32 (35); measles, 17 (11); scarlet fever, 28 (16); whooping cough, 27 (28); diphtheria and croup, 41 (56); malarial fever, 0 (3); tuberculosis of lungs, 258 (308); tuberculosis of other organs, 51 (49); cancer, 130 (118); cerebro-spinal meningitis, 38 (26); diseases of nervous system, 372 (382); diseases of circulatory system, 254 (304); diseases of respiratory system (pneumonia and tuberculosis excepted), 96 (175); pneumonia, 112 (258); infantile diarrhoea, 689 (177); diseases of the digestive system (infantile diarrhoea excepted), 223 (188); Bright's disease, 181 (191); suicide, 23 (28); all other causes, 660 (571); totals, 3232 (2920).

Food and Drugs.—During the month ending August 31, 1907, 725 samples were purchased for examination, under the direction of the State Board of Health, of which 20.7 per cent. were adulterated. Milk, 522 specimens, 82 adulterated; cream, 62 specimens, of which 7 were below the standard as was the one specimen of butter. Samples of water analyzed, 93.

Bacteriological Examinations for Diagnosis.—During the month ending August 31, 1907, 689 specimens were examined for diagnosis as follows: From suspected cases of diphtheria, 142; tuberculosis, 232; typhoid fever, 283; malaria, 19; miscellaneous, 13.

STATE BOARD OF MEDICAL EXAMINERS.

Dr. J. W. Bennett, secretary of the State Board of Medical Examiners of New Jersey, reports the written examination held at Trenton, June 18-19, 1907. The number of subjects examined was 9; total number of questions asked, 135, from which candidate was required to answer 90; percentage required to pass, 75. The total number of candidates examined was 63, of whom 53 passed and 10 failed. One candidate withdrew from the examination. The following colleges were represented:

PASSED.

College.	Year Grad.	Per Cent.
Howard University.....	(1905)	83.5
Georgetown University	(1897)	88.2
Northwestern Univ. Medical School.....	(1906)	83.
Hahnemann Med. College, Chicago.....	(1902)	79.1
Kentucky University	(1895)	88.7
College of P. and S., Baltimore.....	(1906)	77.1
Baltimore Medical College....	(1906) 86..	*81.
Maryland Medical College.....	(1907)	75.8
University of Maryland.....	(1903)	83.3
Johns Hopkins Medical School.....	(1906)	77.
Dartmouth Medical College.....	(1901)	83.4
Long Island College Hospital.....	(1906)	84.
College of P. and S., N.Y. (1888) 79.5..	(1906)	81.5
Woman's Med. Coll. of Pennsylvania (1907) 82.6,		85.5,
85.7, 86.5, 87.1, 87.6, 88.2.		
University of Pennsylvania (1904) 86.7; (1905) 84.5;		
(1906) 88; (1907) 79.5, 81.8, 82.8, 83.2, 83.4, 83.5,		
84.5, 85.2.		
Hahnemann Med. College, Philadelphia (1898) 83.4;		
(1901) 82; (1906) 80.3; (1907) 74.4, 81.6, 82.3,		
83, 83.5.		
Jefferson Medical College (1906) 78.2, 80.4, 80.5; (1907)		
85.5, 82.8, 83.8, 84.8.		
Medico-Chirurgical College, Philadelphia (1906) 84.4;		
(1907) 79.3.		
University College of Medicine, Richmond. (1907)		77.4

FAILED.

Chicago Homeo. Medical Coll.....	(1897)	68.
University of Louisville.....	(1906)	67.5
Baltimore Medical College....	(1904) 62..	(1906) 73.8
College of P. and S., Baltimore.....	(1904)	72.5
University of Pennsylvania.....	(1867)	73.1
University of Naples, Italy (1899)†; (1905)		45.2;
(1906) 67.5.		
Royal University of Turin, Italy.....	(1906)†	

*Percentage not given. †Expelled from examination.

PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL ON PHAR- MACY AND CHEMISTRY.

(Continued.)

gout, lithiasis and the various forms of the so-called uric acid diathesis. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

LYSIDIN.

CH₂. N:

Lysidin, $\begin{array}{|c} \text{CH}_2. \text{N:} \\ \text{C.CH}_3 = \text{C}_4\text{H}_8\text{N}_2, \text{ is a mona-} \\ \text{CH}_2.\text{NH.} \end{array}$

tomie base derived from ethylene diamine.

Actions and Uses—Lysidin is said to be a diuretic and is recommended as a uric acid solvent on the theory that, because it forms a very soluble salt with uric acid, it will facilitate the elimination of that substance. It is claimed that it is superior to piperazine. It is recommended in

MERCUROL.

Mercuriol is an organic compound of mercury with nucleic acid from yeast, containing 10 per cent. of metallic mercury.

Actions and Uses—Mercuriol does not coagulate albumin; it has marked bactericidal power and possesses the pharmacologic action of soluble mercury compounds. It is recommended as a local antiseptic application and as an antisypilitic remedy. Dosage—0.03 to 0.12 Gm. (½ to 2 grains). Manufactured by Parke, Davis & Co., Detroit, Mich.

MESOTAN.

Mesotan, C₆H₄.OH.CO.O(CH₂.O.CH₃)=C₆H₁₀O₄, is the methyl-oxymethyl ester of salicylic acid, analogous to wintergreen oil.

Actions and Uses—The action of mesotan is similar to that of oil of wintergreen, but it is more irritating to the skin. Dosage—Being quite irritating when applied pure to the sensitive skin, it is employed diluted with an equal volume of olive oil, and without friction. Simple application to the affected part, which need not be covered, or, if so, only slightly, suffices to give prompt relief. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

METHAFORM.

A name applied to chlorbutanol (which see). Manufactured by F. Stearns & Co., Detroit, Mich.

MIGRAININ.

A mixture of antipyrine 85 parts, caffeine 9 parts and citric acid 6 parts.

Actions and Uses—It is antipyretic and analgesic, combining the actions of its components. Dosage—0.4 to 1 Gm. (6 to 15 grains) in powder, cachets or tablets, the dose being repeated once or twice during the day. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

NEUROCAINE.

Each billet contains cocain hydrochloric 0.05 Gm. (1/12 grain), without excipient. The billets are ⅜ inch long, 1/20 inch in diameter and very soluble. Neurocaine is used for pressure anesthesia or as a local anesthesia in dental practice. Prepared by Schieffelin & Co., New York.

NEURONIDIA.

An elixir said to contain in each 8 Cc. (2 fluidrams) 0.26 Gm. (4 grains) of veronal (diethylmalonylurea) in a menstruum containing 35 per cent. of alcohol, with aromatics.

Dosage—(8 to 16 Cc.) (2 to 4 fluidrams). Prepared by Schieffelin & Co., New York.

NOVARGAN.

Novargan is an organic silver-albumen compound containing 10 per cent. of silver.

Actions and Uses—Novargan is a bactericide; it is claimed to be more effective and less irritating than other protein-silver compounds. Dosage—0.5 Cc. (8 minims) of a 15 per cent. solution, by instillation on the anterior surface of the urethra, through a catheter (23 Cm. (9 in.) long, No. 13 French scale) as an abortive. Manufactured by the Heyden Chemical Works, Radebeul, Germany, and Garfield, N. J.

NOVOCAINE.

Novocaine, C₆H₄.NH₂(COO.C₂H₄.N(C₂H₅)₂.HCl) = C₁₃H₂₁O₂N₂Cl, is the monohydrochloric of para-aminobenzoylethylaminoethanol.

Actions and Uses—It is a local anesthetic similar to cocaine, but said to be far less toxic than any of the cocaine substitutes. When injected subcutaneously it is said to exert a prompt and powerful anesthetic action, but the effect is not sustained. This may be remedied by the simultaneous injection of suprarenal alkaloid. Novocaine is not irritant. It is recommended in all cases in which cocaine is indicated. Dosage—For infiltration anesthesia, solutions of 0.25 Gm. (4 grains) novocaine in 100 or 50 Gm. (3.2 or 1.6 ounces) physiologic salt solution, with or without 5 or 10 drops of suprarenal alkaloid solution (1:1000); for instillations and injections, solutions of 0.1 Gm. (1.54 grains) novocaine in 10 or 5 Gm. (150 or 75 grains) salt solution, with or without 10 drops of suprarenal alkaloid solution (1:1000). In ophthalmology, 1 to 5 to 10 per cent. solution and in rhinolaryngology 5 to 20 per cent. solutions are recommended, with the addition of 6 to 8 drops of suprarenal alkaloid solution (1:1000) to each 10 Cc. (160 minims). Internally, owing to its feeble toxicity, it may be given in doses up to 0.5 Gm. (7½ grains) to adults. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

Nutrose is a sodium salt of milk casein, containing 65 per cent. of proteids.

Actions and Uses—Nutrose is recommended as a non-irritant nutrient in wasting diseases, such as the cachexias in carcinoma, anemia, diabetes, etc., and in acute and chronic febrile ailments, such as pneumonia, typhoid fever and tuberculosis. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ORGANIC IRON PREPARATIONS.

The term "organic iron" is confined by modern usage to those organic compounds of iron which do not give the chemical tests of this metal (blue color with potassium ferrocyanide, blue-black color with hematoxylin, etc.) until the structure of the molecule has been destroyed by reagents. The resistance to this destruction varies greatly: some (such as hemoglobin) require incineration of the action of concentrated acids; while others give the iron-tests after treatment with even fairly dilute acids. The organic iron compounds occurring naturally in animal and vegetable tissues (which are often termed "food-irons") belong generally to the more resistant class, while the iron of the synthetic preparations is usually liberated fairly readily. This does not, however, constitute a sharp line of distinction between the two classes, nor is there any good evidence that they differ in therapeutic action. Until this dif-

ference is established all organic iron preparations, whatever their source, may be placed in a single class. It is evident, however, that organic iron (chemically) which is destroyed by 0.2 per cent. hydrochloric acid at the body temperature, can not be classed as an organic iron in the therapeutic sense. It should be emphasized that salts of iron (which give the iron tests directly) are classed as inorganic iron, whatever the acid radicle. True albuminates, peptonates, etc., of iron are, therefore, inorganic.

Actions and Uses—Organic iron preparations are used to increase the hemoglobin in conditions of anemia. Bunge supposed that only organic iron could be absorbed and assimilated by the body, the reputed action of inorganic iron being altogether indirect, and due to its local effects on the alimentary canal. This theory was modified by Abderhalden, to the effect that inorganic iron, while it could not be converted into hemoglobin, nevertheless stimulated the assimilation and conversion of organic iron. The latest work, however (Tartakowski), seems to prove conclusively that inorganic iron is assimilated and converted into hemoglobin, and is in so far therapeutically, fully equal to organic iron. Many authors, however, still adhere to the theories of Bunge and Abderhalden. At all events, a real difference exists between the organic and most of the inorganic preparations, namely, in the local irritant and astringent action of the latter, and the absence of these effects in the organic compounds. These actions may be desirable in some cases and undesirable in others. It should also be remembered that organic iron may often be administered in sufficient amount, and most economically, by selecting a dietary rich in iron, such as red meats, egg-yolks, green vegetables, whole wheat, etc.

ORTHOFORM-NEW.

Orthoform-new, $C_8H_5(COO.CH_3)(NH_2)(OH)$ 1:3:4 = $C_8H_9O_5N$, is the methyl ester of meta-amidopara-oxybenzoic acid.

Actions and Uses—Orthoform-new is a local anesthetic, resembling cocaine in its local action, but not penetrating the tissues on account of its insolubility. It has practically no action on the unbroken skin and produces no irritation except slight corrosion about the place of application. It is somewhat antiseptic and practically non-toxic in the usual doses. It is used internally to relieve the pain of gastric ulcer. Since it acts only on ulcerated surfaces, the relief of pain has been assumed to be evidence of the existence of an open ulcer. It has been applied locally as an analgesic to wounds of every description. It has been used in dentistry, in nasal catarrh, hay fever, etc. Dosage—Internally, 0.5 to 1 Gm. (8 to 15 grains) in emulsion; locally, in substance as a dusting powder or mixed with milk sugar for insufflation, dissolved in ether and mixed with oil for pencilings, or as salve with wool fat (lanolin), etc. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ORTHOFORM-NEW HYDROCHLORIDE.

Orthoform-new hydrochloride $C_8H_5O_5N.HCl$, is the hydrochloric of meta-amido-para-oxybenzoic methyl ester.

Actions and Uses—The actions, uses and dosage of this compound are similar to those of orthoform-new (which see). Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

OVOFERRIN.

Ovoferrin is a solution containing 5 per cent. of an artificial proteid-product in which iron is present in the so-called "organic" or "masked" form (a form which does not give the iron-test directly). The solution also contains 10 per cent. of alcohol and some aromatics.

Actions and Uses—Ovoferrin is not appreciably affected by the gastric juice, a 0.5 per cent. solution of hydrochloric acid liberating its iron very slowly and incompletely. The product ranks with the other forms of artificially masked iron, which are devoid of the local action of the soluble inorganic salts, and, according to some authorities, are more readily absorbed and utilized. Dosage—8 to 16 Cc. (2 to 4 fluidrams) corresponding to from 0.03 to 0.06 Gm. ($\frac{1}{2}$ to 1 grain) three times a day. Manufactured by Barnes & Hille, Philadelphia.

SOMNOS.

The manufacturers of Somnos have been claiming that their preparation is a definite "chemical product formed by the synthesis of chlorethanal with a polyatomic alcohol radical." Very few, if any, physicians who read this description realized that chlorethanal is another name for chloral and that a polyatomic alcohol radical, in this instance meant glycerin. In *The Journal of the American Medical Association* for September 1, 1906, attention is called to the actual facts in regard to this preparation in a comment on the circular letter published by the H. K. Mulford Company. In the literature regarding the physiologic action of Somnos the H. K. Mulford Company claimed that it has no "depressive action on the heart or circulation and has no destructive influence on the red corpuscles of the blood, nor does it cause gastric disturbances by continued use." The literature also repeatedly said that it contained no chloral and that it was free from the bad effects of chloral.

The Council on Pharmacy and Chemistry, in *The Journal A. M. A.* for September 15, publishes a report of investigations that were made on mice, guinea pigs and dogs for the purpose of proving or disproving the claims made for Somnos by its manufacturers. The result of the investigation showed that the physiologic action of Somnos is practically indistinguishable from that of a 5 per cent. solution of chloral hydrate.

According to the reports, Somnos is no less toxic than chloral hydrate, and the depressing effects on the temperature, respiration and circulation are the same in each instance. The Council suggests that physicians who are in the habit of using Somnos should compare the results they obtain from it with a 5 per cent. elixir of hydrate of chloral. In this way they can verify for themselves whether or not the Council's conclusions are correct, that a 5 per cent. elixir of chloral glycerate (Somnos) has the same physiological and therapeutical action as a 5 per cent. elixir of chloral hydrate.

The following are some of the conditions in the presence of which an examination for tabes dorsalis should never be omitted. 1. All primary swellings of the knee or ankle joint without apparent origin. 2. "Sciatica" and "lumbago." 3. A deep ulcer on the base of the great toe. 4. Repeated vomiting at various intervals, with periods of well-being intervening. 5. Abdominal pains without other evident cause.—*Amer. Jour. of Surgery.*

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 5. ORANGE, N. J., NOVEMBER, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

SYMPOSIUM ON DISEASES OF THE GALL BLADDER.

Continued.

FOURTH PAPER.

Medical Treatment of Diseases of the Gall-Bladder.

By John H. Musser, M. D.,
Philadelphia, Pa.

It was not so long ago that a little blind girl was writing an essay on the rabbit. She had never seen a rabbit and did not know what it looked like. When she had finished she found she had said nothing about its tail. She asked her mother whether the animal had a tail. "Yes," the mother said, "but nothing to speak of." The little girl finished her composition by saying, "The rabbit has a tail, but you must not say anything about it."

This is somewhat analogous to the subject that has been assigned to me, for the present-day view of the pathology and medical treatment of gall-stones is similar to that of the rabbit's tail—a very small end of the subject—nothing to speak of. However, the subject is really one of very broad lines; and hence something—and much more than occurs to one at first thought—can be said about this condition—not the medical treatment of gall-stones, but, rather, the medical treatment of that state of the liver and the ducts, including the gall-bladder, on account of which there is a tendency to the formation of gall-stones—that is to say, cholelithiasis.

Notwithstanding the fact so well appreciated that if gall-stones are present and are

doing mischief, the best thing to do is to have them out, it is, nevertheless, also well appreciated that there are many instances in which operative procedures cannot be resorted to. Hence, we are forced to follow out medicinal lines of management in such cases. The age, the presence of intercurrent disease, and a number of other circumstances, may render operative procedures absolutely inadmissible, yet for these classes of cases a great deal can be done medically, and perhaps the threatened storm induced by the presence of gall-stones can be allayed.

Preceding cholelithiasis there is usually a congestion or catarrh of the biliary passages, causing a stagnation of bile, with possible infection, and secondarily the formation of gall-stones. This hepatic condition has for its origin: (1) Toxic influences, arising from without or from within the body; (2) alterations of gastric or intestinal digestion, producing such modifications of the reflexes in the duodenal end of the stomach as to either limit or increase the hepatic secretion, thereby inviting the development of cholelithiasis; (3) circulatory conditions of the liver secondary to heart disease, either valvulitis or myocarditis, or perhaps even arteriosclerosis; (4) morphological conditions causing displacement of the organ. Congestions and biliary retention are the result of these conditions and are predisposing factors in the production of gall-stones. Added to these we have the last predisposing condition—infection. In a sense, the latter may be looked upon as an exciting cause and yet we must admit it is not likely to be operative unless there is some change in the bile. If we recognize these etiological factors we can readily see that a large field

for medicinal or hygienic therapy exists in cholelithiasis; and that, in accordance with our judgment as to the factors back of the disease, we must lay down varying plans of treatment. In a general way, then, it may be said that cholelithiasis demands actiologic and hygienic treatment; removal or modification of the cause, so far as this can be brought about. Further than that, however, there are specific measures, for we realize that, with the catarrhal conditions often present more serious inflammatory states, such as that of cholecystitis or pericholecystitis may be produced.

First of all, in an attempt to modify the cause, regulation of the diet must be considered one of the chief measures. Such regulation does not necessarily need to be one intended specifically for the liver. There are some who feel that a reduction of the diet is the essential thing. The patients in this class of cases are usually over-eaters, and are giving their liver too much to do, if such an expression can be employed. In the larger proportion of the cases, independently of any classification as to the kind of food, if the intake of food be cut down one-half, you are taking the first and best step toward preventing or curing cholelithiasis. There is no doubt that independently of the pharmaco-therapeutic value of the courses of treatment at Carlsbad and other places in having the patient drink large amounts of water which is medicated, the cures are largely brought about by reduction in the diet. If any specific lines of diet are to be enjoined, they must be those indicated more particularly by the need of the gastric and intestinal digestion. If there is a hyperacidity, a diet to meet this condition should be devised; if there is a sub-acidity or anacidity, the diet must meet this condition. If the stomach is dilated, or if there are evidences of intestinal indigestion, or of enteritis, or of mild catarrhal conditions of the intestine, a dietary to relieve this must be insisted upon. This is a 25 per cent., or even a greater than 25 per cent., measure in the step towards the relief of cholelithiasis.

Hydrotherapy avails much—water internally and water externally. The latter includes proper general baths and proper local baths. The use of alternate hot and cold douches over the liver, of hot and cold compresses alternately, or the continuous application of hot compresses for half an hour or an hour twice daily, when there are congestions or inflammations (cholecystitis, cholangitis) are not only valuable for the

relief of the symptoms, but are also great aids in the relief of the cholelithiasis. We cannot insist too strongly also upon hydrotherapy by means of the general baths and the local douches or compresses as a means of contributing to the hepatic drainage.

Correct morphological conditions by the use of a properly fitted abdominal binder. In most of the subjects of cholelithiasis there is a ptosis of the liver and other organs. In fat subjects the binder is perhaps not so necessary; but when the abdomen is pendulous, it seems to indicate that an abdominal bandage should be applied. I am quite sure that in a large number of cases of cholelithiasis the frequency of the attacks has been lessened, and perhaps their severity modified by the wearing of a properly constructed bandage.

I need not dwell much upon the other hygienic measures that should obtain in carrying out the treatment for cholelithiasis. Perhaps, in speaking of the internal use of water, I should have said more about the drinking of waters as of the "cures." I feel very strongly that, unless gall-stones are doing a great deal of mischief, it is far more conservative to have our patients, if possible, take a good cure, either at Carlsbad or at one of the other resorts that are well known abroad, or perhaps at Bedford or Saratoga in this country. Thereby, we shall at least relieve the complicating conditions so clearly brought out by the preceding speaker before operative measures are resorted to. I have seen numbers of instances in which a quiescence of the calculi following subsidence of the inflammation has resulted. It is quite certain that after an operation the congestive or early inflammatory conditions are relieved by the rest, dietetic and hydrotherapeutic measures of a "cure."

Regarding the circulation, I would say a word: One must study very carefully the heart and the vessels. I think that, as the liver is an organ containing a large amount of blood, the successful management of cholelithiasis cannot go on without a careful study of the circulation. The weak and dilated heart, the low tension, the evidences of modifications of pressure in the venous side of the circulation as indicated by the cardiosphygmograph, suggest remedies that should undoubtedly be employed when these conditions are present. In other words, the treatment of cholelithiasis is not only the treatment of the liver, or a local disorder, but is the treatment of the individual. One cannot follow fast rules with regard to its

management. One should weigh all the features of the case, and from this structure and that organ get close indications for the treatment of that general condition that, if neglected, means the neglect of small factors that may have to do with the success or the defeat of any line of management.

Regarding the use of drugs in cholelithiasis, there are very few that can be administered with any degree of confidence that results are to be secured; save those indicated from a careful study of the gastrointestinal tract (including the stools and gastric analysis), those that are indicated by a study of the circulation, and those that are indicated by a study of the blood. The presence of anemia and other modifications of this tissue requires special treatment. If I were to name any drugs as having virtue in a general way, I should, of course, put the alkalies first. If there are congestions or a tendency to congestion or stasis, the old-fashioned remedy, muriate of ammonia, provided it is not contraindicated on account of gastric or gastro-intestinal states, is of value. This drug has a direct influence upon circulatory conditions, and it also has an influence upon the secretions. It is a remedy, we are told, that thins the bile, allays the catarrh and modifies the amount of mucus secretion.

The so-called biliary antiseptics come next in order—*aspirin*, *salicylate of soda*, or other *salicylates*. I have not been able to demonstrate it with the accuracy that one ought to, but I think that after the establishment of a biliary fistula, the secretion of bile is undoubtedly increased by the use of these remedies; and I imagine, though I have made on this line no bacterial investigations and studies, that the micro-organisms are lessened in amount. In other words, the bile infected gradually becomes sterile. How much this is due to the drugs and how much to the drainage, I am not able to state; nor do I know how any statement of this character can be positively made. The use of *phosphate of soda*, of course, needs scarcely to be mentioned. The value, up to a certain point, of this remedy and of the sodium salts is well known. Whether the result is due to their action as *cholagogues* or to the fact that they relieve the stasis by purgation, it is impossible to say.

The gall-stone that is quiet in the gall-bladder or in the bile-ducts cannot be influenced by any medicinal treatment. There is no solvent for gall-stones, and there is no medicinal means for removing them. Of

course, if there is a *cholecystitis* and a *cholangitis*, the measures that I have suggested are to be resorted to. If the gall-stone is putting the life of the patient in peril, or if there is arising in consequence of its presence a complaint that is menacing the individual, its management must be along the lines that will be so well given to you by Dr. Deaver. The use of olive oil is still thought of by those who speak of the solvent action for the remedial treatment of gall-stones. I have never seen any relief to the gall-stones from the use of olive oil, but I am bound to say that sometimes there is a relief to the symptoms. Such relief, so far as I can see—and I think it is the consensus of opinion generally—is owing to the fact that with gall-stones there is usually a *hyperacidity*; and that, because of this, there is either simple *gastralgia* or *pyloric spasm*. It is these symptoms—the symptoms of *hyperacidity*—that are relieved when olive oil is administered, and it is the relief of these symptoms that causes the oil to get the credit of dissolving the gall-stones in the body. We all know, also, that when olive oil has been administered the patients can almost always bring the doctor a handful of *pseudo gall-stones*. I think that we all agree that, even though there is a relief of the symptoms, the patients, in most instances, will soon come to the surgeon, because the symptoms continue, and something active must be done.

These, then, are in a general way, the measures that can be resorted to for the medicinal management of *cholelithiasis* and of gall-stones. I shall not take up your time with any suggestions for the treatment of the complications of gall-stones, but will urge upon you the fact that it is only in a general way that we can hope for success in the management of *cholelithiasis* along medicinal lines. Its treatment is always not merely the treatment of a local process, but the broad, general management of a man that is sick.

Two further duties of the medical practitioner should be observed: First, to relieve or dissipate, as far as possible, all the complications of gall-stones before sending the patient to the surgeon; second, to select a surgeon of experience, and one who has a clearly thought-out technique. Only long years of patient work in experimental surgery and of training by a senior, can fit the surgeon for the great responsibility of operating on such cases.

THE SURGICAL TREATMENT OF GALL BLADDER DISEASE.*

By John B. Deaver, M. D.,
Philadelphia, Pa.

Any statement, however brief, of the underlying facts of gall bladder surgery must be based upon a correct understanding of gall bladder pathology as seen by the surgeon at the operating table—that is to say, upon the living pathology, based on the autopsy in vivo. You will bear with me then if I repeat a few of the statements of those who have preceded me concerning the surgical pathology of gall bladder disease.

To the surgeon, disease of the gall bladder, excepting of the malignant variety, is a manifestation of some form of infection. The kind, severity and duration of the infection vary within the widest limits, and correspondingly the pathological processes exhibited are many and complex. Yet in our treatment, and especially in our surgical treatment, of gall bladder disease we must never overlook the fundamental importance of infection as the basis of the lesion found.

Broadly speaking, infection of the biliary tract shows itself in two great varieties—the calculous and non-calculous forms of cholelithiasis, with their various complications and sequelæ. The calculous form is more common, and has engrossed the attention of the surgeon to a greater degree. The formation of gall stones is the result of a mild infection, with an attenuated culture of slight virulence, in conjunction with several other factors. Nevertheless it is still an infection, even though in many cases after the gall stones have been formed the infection ceases. The non-calculous form is rarer, and generally an acute one, although not always so. It is far less frequent than the calculous variety, less varied in its symptoms and as a rule less severe in its pathological and clinical manifestations.

In both forms we find various grades of inflammation of the gall bladder to deal with—chronic cholecystitis and acute cholecystitis of several forms—catarrhal, purulent, hemorrhagic, ulcerative and gangrenous. The term “phlegmonous cholecystitis” is covered by the term ulcerative or gangrenous, as the case may be. The consequences of neglected gall bladder infection are the principal cause of trouble to the surgeon. The main forms commonly met with are cholangitis, hepatitis, perforation of the gall

bladder, peritonitis and adhesions of the upper abdomen. Bland Sutton reports a case of operation for stone in the common duct, where the adhesions were so extensive that the liver could not be seen. These sequelæ, rather than the gall bladder disease itself, render the task of the surgeon difficult. And it is all the more distressing to find them present in so many cases because we know that they are practically always the result of delay in surgical intervention—delay too often under the guise of medical treatment. If we regard gall bladder disease in its true light—as a local infection with great power to spread, and capable of prompt relief by the surgeon—operation will no longer be delayed until hope is gone and surgery has become but a last resort.

As calculous cholecystitis is of paramount importance, both by its frequency and the necessity for radical treatment, I shall first consider the surgery of this form of gall bladder disease. Granting that a diagnosis of gall stones has been made, there are certain indications for *immediate* intervention by the surgeon. These are:

1. The occurrence of any of the complications above mentioned, showing a spread of infection.

2. The failure of amelioration of symptoms in obstruction of the common duct after a reasonable interval of treatment, which I consider to be from two to three weeks.

Certain other conditions demand operation as distinguished from medical treatment, but the necessity is not so urgent a one. These are:

1. Repeated attacks of biliary colic, or continued abdominal distress and indigestion.

2. Hydrops of the gall bladder.

3. Stone in the choledochus.

Other cases of gall stones may be treated by medical means, provided quiescence and not cure is desired. Some cases of cholelithiasis which would according to these rules demand operation yet show some contraindications to surgical procedures. The contraindications to operation may be summarized as follows:

1. Extreme age.

2. Organic lesions of heart, lungs or kidneys.

3. Marked cholaemia.

4. Anaemia of marked degree or greatly lessened coagulability of the blood.

In cases which present one or more of these features, operation, if done at all, should be entered upon with a full apprecia-

* Read at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

tion of the dangers and as an absolute necessity only. It may be mentioned, however, that, while chronic nephritis is to be feared, the acute or subacute form caused by the cholelithiasis itself does not give a bad prognosis (Riedel). If operation has been decided upon and the case admits of a few days' delay, the time should be utilized to place the patient in the best possible condition. The heart, gastro-intestinal tract and kidneys should be looked after, and anaemia combatted. Should the coagulability of the blood be lessened we may attempt to improve this by the use of calcium chloride or lactate, although of the value of these drugs I am entirely doubtful.

As to the operation itself, it is well always to remember the remarks of Kehr upon the purpose of gall stone surgery. He states that it is threefold.

1. The removal of the inflammation causing the gall stones.
2. The removal of the stones.
3. The prevention of recurrence of the stones.

The accomplishment of the first and last of these three tasks to which we set ourselves depends upon how we deal with the infection present, and to this phase I shall return later. The technique of the operation is not simple, but there are certain fundamental rules by the observation of which we can generally get the best results. The main facts in my own technique of gallstone operations are as follows:

I. After the incision has been made and the field of operation exposed we should at once wall off this field from the general abdominal cavity and keep from possibly spreading the source of all the patient's trouble—infection. I use for this purpose both large gauze pads and large and small marine sponges. I carefully introduce the gauze pads first, placing the sponges upon these. The sponges have a two-fold advantage in that they more readily absorb bile and pus than the gauze, and because of their resiliency may be made to act as retractors when the hand of an assistant is placed upon them.

II. If the field of operation is marked by adhesions these may have to be carefully loosened and properly dealt with. Adhesions which are very evidently impinging upon and interfering with neighboring organs must be removed. But on the other hand, adhesions which are doing no damage should not be disturbed. More harm is done in this way than good accomplished, the operation is delayed and the operator

often finds himself and his patient in difficulties which a little judgment and restraint could have avoided.

III. Only so much should be done as is required thoroughly to meet the conditions present, especial care being used when acute infection is present.

IV. Whenever infection is present or suspected and the gall bladder is opened, it should be drained. My method of drainage is the commonly used rubber tube drain. It is evident to any one who has done much gall bladder surgery that the appearance of the bile is no certain criterion of its infectiousness. Thick, creamy pus is often sterile, and clear bile often has very virulent organisms in it. Therefore, even in the presence of apparently normal bile, I consider an ideal cholecystotomy an unwise operation, and I do not do it. In every gall stone operation the bile should be regarded as infectious and not allowed to spill and soil. By working along these lines the post-operative complications will be reduced to a minimum.

V. The gall bladder should not be removed unless it is so damaged as to render it incapable of functioning as a bile reservoir. If the fundus only is diseased the gall bladder should be resected instead of removing it entirely.

VI. When a gall bladder is removed in the presence of infection, drainage of the stump of the cysticus, when this can be done, should be made. If the lumen of the cysticus is reduced, it should be laid open to its junction with the common duct, with a pair of scissors, and then a rubber tube is introduced into the common duct and carried into the hepatic duct. If the operator prefers he may tie off the cysticus and open the common duct, through which opening a rubber drainage tube is carried into the hepatic duct. Under these conditions the hepatic duct can be opened directly. All of these procedures are carried out without much difficulty when the structures and their relations are normal, but under reverse conditions the operation may become most difficult. One should be master of both the normal and pathological anatomy of the upper right abdomen if he would operate with confidence and to the best interests of the patient.

Some assert that after cholecystectomy or cholecystostomy sufficient drainage takes place by means of the choledochus into the duodenum. But it is much wiser to drain outside of the abdomen than to allow the infectious bile to flow into the duodenum

from which, and the intestine further along, the toxic elements may be taken up by the tributaries of the portal vein and the hepatic cells be exposed to the risk of reinfection. To me it is incomprehensible that surgeons should regard drainage of the hepatic duct through the common duct into the duodenum as sufficient in cases of infectious cholangitis. To drain one infected organ into another—the duodenum—I consider unsurgical in the extreme. In cases of severe pyelonephritis we are not satisfied with the drainage afforded through the ureter, into a bladder which was probably the original seat of the disease—we perform nephrotomy and drain the kidney directly into the loin. So when the liver is infected and we have a suppurative cholangitis the only chance of safety lies in direct hepatic drainage through the laparotomy wound.

VII. When the gall bladder is removed for disease in the absence of acute infection, drainage should be made by means of a cigarette drain or by a piece of gauze passed through a split rubber tube to the stump of the viscus and the cystic duct. This guards against hemorrhage and infection, and at the same time provides for an avenue of escape for the bile should the ligature tying off the cystic duct be thrown off by the vis a tergo.

VIII. Choledochotomy without drainage should never be performed, as it is even more irrational and dangerous than cholecystotomy without drainage.

IX. The stones present should all be removed to render the operation successful. In some cases, however, in which an acute infection is very severe it may be better to open and drain, and remove a stone which may be very hard to reach when the danger of infection is not so great.

If the case has been carefully selected and the above rules are followed, the operation will be successful in the vast majority of cases in which no complications exist. When the graver complications are found they must be dealt with according to the demands of each particular case. No matter how handled, they increase the mortality enormously.

The after treatment in most gall stone cases is simple. They get well by themselves. Occasionally, however, certain conditions must be dealt with. Immediately after operation persistent vomiting may occur. Lavage, repeated as often as necessary, is the only reliable and satisfactory remedy to use in this distressing condition. The kidneys must be watched carefully and

before they show evidence of lagging must be stimulated. I use enteroclysis of saline, but prefer to immediately give hypodermoclysis, 1000 c.c. every four to six hours, in conjunction with sparteine hypodermically, and in this way we know that plenty of urine will be voided. Continuous saline by Murphy's method is also of value. Practically all cases respond well to this treatment. When the heart action is poor I have found digitalis the stimulant par excellence, and do not hesitate to use it hypodermatically in extreme cases. Its so-called derivatives and substitutes I have found of but little if any value. Giving the derivatives of digitalis always reminds me of sending a boy on a man's errand.

The drainage should be left in in all cases until it has accomplished its purpose and is ready almost to drop out. The tubes in the gall bladder and ducts remain in generally from ten to fourteen days. I do not attempt lavage of the bile passages as described by some authors, Kehr among others.

The diet should be restricted after operation, especially until the drainage has been removed, and I have found it wise to keep the patients on a diet composed chiefly of animal broths, buttermilk, peptonized milk, etc., until this is done. The bowels are moved on the third day by a dose of castor oil, assisted if necessary by an enema.

Another point of importance is the arrangement of the drainage tube and the bottle within a dressing upon the patient himself, so that he may move about freely in bed. This reduces to a minimum the chances for phlebitis or pneumonia.

As to non-calculous cholecystitis, the operative indications vary slightly, the contraindications remaining the same. In the presence of chronic infection with adhesions the operation is one of choice only, though, of course, to be desired. Acute infection as in the calculous variety, generally calls for operative intervention. One must be prepared to do a gastro-enterostomy or any other operation in the upper abdomen in conjunction with surgery of the biliary tract.

The variety or organism causing the infection calls for some discrimination in operation. Thus, I rarely operate upon acute cholecystitis in the course of enteric fever, not because of the local condition, but because of the patient's general condition. Where the infecting microorganism is the streptococcus the effect must be lethal unless the gall bladder is opened and drained in the incipency of the attack. I have been

fortunate enough to have one such case recover in which careful bacteriological examination showed the presence of this organism. The symptoms of streptococcus infection are more intense than those commonly seen and due to the *B. coli*, staphylococcus aureus, etc. They are the usual signs of pain, tenderness, and in addition severe chills followed by high fever and profuse sweating. These being present always warrant immediate operation. Medicine in this type of case is not only useless but hurries the process to a rapidly fatal end by delaying operation.

The technique of operation is the same in non-calculous as in calculous cholecystitis, but we have not as much trouble, as we are entirely relieved from dealing with foreign bodies, often in inaccessible places, and can confine our attention wholly to combating infection.

Malignant disease of the gall bladder is fortunately rare. I have seen but few cases of primary carcinoma of the gall bladder and in most of these operation was performed so late as to give but slight relief—and, of course, no cure—to the patient.

The next question that would naturally arise is, "Does gall stone surgery and gall bladder surgery give us good results?" Undoubtedly, yes. An operative recovery is practically always a permanent one. Reformation of gall stones is most uncommon, and I think generally depends upon leaving some fragment in the biliary tract. Infection is done away with by good drainage, though of course reinfection cannot always be avoided. In a series of 217 gall bladder cases operated upon by me in the last few years, and including 182 gall stone cases, my total mortality was 13.8 per cent. With increasing refinements in technique and greater discrimination in choosing cases for operation, the mortality has been constantly dropping. The mortality in the calculous form was 14.8 per cent., and in the non-calculous form 8.5 per cent. Cholecystostomy in simple cases gives a mortality of far under 5 per cent. When acute infection is present the rate of death with all operations rises to almost 20 per cent., *i. e.*, 18.5 per cent.

The cause of death in over half the cases can be directly or indirectly attributed to the presence of infection before operation. A septic patient is a poor subject for major surgery. In the remaining cases there also generally exists some contraindication to operation—one of the number mentioned above.

But the surgeon can go no further. The general practitioner and internist must send their cases to the operating table earlier and in better condition, and the risks of surgery of the gall bladder will then be at a minimum. The whole question depends upon a realization that we are dealing with infection, that it can be treated surgically, and that the sooner this is done the better the patient's chances will be. The internist and surgeon must work hand in hand if the best results are to be accomplished.

DISCUSSION OF THE FIVE PAPERS ON DISEASES OF THE GALL BLADDER

Dr. Ellis W. Hedges, Plainfield.—After listening to a series of papers such as we have had this morning from masters in medicine, one naturally feels timid about first venturing into the arena of discussion. I feel much as a private soldier might feel if generals had held a council of war about the best way to attack a certain town, and had then called him and asked what he thought about it. He could not add much to the knowledge of how to conduct the campaign, and I cannot add much to the knowledge regarding gall stones, when we have masters and generals in the medical army talking to us.

One of the doctors who has spoken to us today began very early to study this trouble. When I was an interne in the Presbyterian Hospital at Philadelphia Dr. John Musser was pathologist to the institution and I furnished a good deal of material for post-mortem work. In every single case that came to autopsy, Dr. Musser insisted upon examining the gall bladder and studying it. He had made up his mind that what there was to know about the subject he was going to know; and I claim considerable credit for having furnished him his early start. How well he has succeeded in his undertaking you may judge from a remark I heard Wm. H. Mayo make at his clinic in Rochester, Minn., a couple of years ago. He said there was one man preëminent in all our eastern section for his knowledge of gall bladder conditions, and that he would trust Dr. John H. Musser every time to make a correct diagnosis of them.

I began the study of the gall early, too. My first lesson on the subject was when I was a school boy and it ran like this, "Omnia Gallia in tres partes divisa est." I am quite sure that if Cæsar were here he would still say: "Gaul is divided into three parts—jealousy, suspicion and melancholy." The old Greeks knew what they were about when they coined the word melancholy; for when the patient is saturated with bile he has no joy in the present and no hope in the future, and anything to relieve the condition becomes imperative. It is hard for one with such a variety of topics to discuss as we have before us this morning to know what to say. The medical treatment I shall drop, as the New York Academy of Medicine did some time ago. I attended a symposium on the subject there, and they summed up the medical treatment by saying, "There is no medical treatment for gall stones."

Regarding the surgical treatment, there is only one criticism that I could make on Dr. Deaver's

remarks; and that is when he said that he hesitated to take out the gall bladder under certain conditions. It seems to me, and this is not merely my own opinion, that if the source of gall stones is almost, if not invariably, in the gall bladder, they being due to the secretion of cholesterolin and bilirubin calcium and mucus from that organ and caused by irritation from some microbic invasion, and if gall stones do not originate from the ducts or the liver, why not take out the gall bladder when you get the chance, and rid the system of the possibility of a recurrence? I heard Dr. Mayo, when he had completed his eight hundredth operation on the gall bladder, say that he had never seen any ill-effect follow the loss of that organ. He said that it is of no more use to the body than is the appendix; that anyone who undertakes to say that there is a function of the gall bladder has as hard a proposition to prove as one who would say that there is a physiology of the appendix. To-day the appendix and the gall bladder are of no use, except to the pathologist and the surgeon, according to Mayo; and I am inclined to think that this is the correct view to take of the matter. We can get rid of them without detriment to the patient.

I wish to refer to one remark of Dr. Harris's regarding the diagnosis of gall stones, when he spoke of how seldom it is made and how few of us are alert to the symptoms. The most important thing for most of us is to be able to recognize the presence of gall stones. It does us good to be stirred up once in a while like this. Some time ago I had occasion to write a paper on the subject, and within a month I had five cases of gall stones.

Ten per cent. of the autopsies on persons dying from all causes show gall stones. In elderly women, one in every four has gall stones. This has a direct bearing upon the treatment of this condition. If they are common in women, it must be due to the retardation of the bile; and that retardation comes from tight lacing. It might be interesting, in this connection, to find out how the West Point cadets get along; because they lace up pretty tight. The points at issue in diagnosis are overlooked, because they are so common. We come across a patient with a little pain in the stomach; and we think it is neuralgia, slight indigestion, or a little colic. We do not do as we should always do—put a patient who comes to us with persistent nausea and vomiting, or with recurrent pains in the epigastric region, on the examining table and, with our fingers, carefully palpate the region of the gall bladder and the stomach. We will then find out what the real trouble is.

Dr. Harris, on account of lack of time, did not give us all the diagnostic signs of gall stone disease that we ought to look for. He spoke of pain and colic. I want to emphasize the fact that the pain is not always severe. We can easily recognize a typical attack, of course. When a patient rolls in a severe paroxysm we have no trouble in making a diagnosis; but when there is only a slight infection of the gall bladder, the pain will be dull and not very pronounced in any way. There will be a slight feeling of malaise and nausea, together with a general feeling of ill-health. These cases are the ones that are constantly overlooked.

One of the symptoms that I think is rather characteristic of gall stone disease is the fever, which is called steeple-chase fever because it goes up and down with remarkable rapidity. It

somewhat resembles malarial fever. If we can rule out malaria, we have gall stone fever. Another symptom is the enlargement of the liver. During one of these attacks the liver will enlarge so much that the lower border may come down to the umbilicus; and the gall bladder may reach below that point. In about two weeks it will go back again, and the tumor will be gone. Whenever we come across a case of persistent nausea and vomiting that we cannot account for indubitably in another way we ought to suspect gall stone disease. In making a differential diagnosis between an enlarged gall bladder and a floating kidney or a tumor of the omentum, if we get our fingers up under the lower ribs on the right side and have the patient take an inspiration, we shall find, if the case is one of gall stones, that the tumor ascends and descends with the respiratory movements. No other tumor will do that. You can always feel it stationary when the patient breathes.

Dr. Chas. P. Noble, Philadelphia.—Mr. President and Members of the New Jersey State Medical Society: After the remarks of Dr. Deaver concerning that body of doctors to which I belong—the gynecologists—I feel bashful and very diffident in appearing before you. Nevertheless, in my judgment, what is needed for the settlement of the complicated questions connected with gall stone disease is the application of the methods of the very specialists whom Dr. Deaver has derided. First, their methods of careful observation; secondly, the refined technique that they have evolved; thirdly, the careful pathological studies that they have made; and fourthly, the logical inductions and the careful conclusions from the evidence that it is the habit of these specialists to make.

With reference to that body of specialists, the gynecologists, my good friends, the general surgeons grow more and more in the habit of saying that there is no longer any excuse for their existence; that now these specialists have so worked out the technique of gynecological operations that any surgeon can cut out the organs of women. This, however, I would call to your attention, is but a small part of the functions of a gynecologist. The advice of a gynecologist is based upon his understanding of the character, the springs of action, and the characteristics of the mind of women; and upon his knowledge of the nature of women in carrying out the chief function for which they were put into the world. Hence, his advice to operate in women is guided and corrected by his knowledge of women as they are; instead of being a mere matter of the mechanical cutting out of their organs, as is so often practised by men of less knowledge and understanding. One general surgeon, Dr. Bevan, of Chicago, has gone so far as not only to say that gynecologists are unnecessary, but also that, as a class, they are dishonest. He, knowing all about the subject himself, pronounces the dictum that they do twice as many operations as an honest man would.

Now I fear that the general surgeons are too much in the habit of following fashion, as a flock of sheep follow a bell-wether; and their latest fad is the getting of patients out of bed in one day or a few days after an operation. In this, as in many other things, they have followed the lead of a gynecologist—my very honest and sincere, but, I believe, deluded friend, Dr. Boldt, of New York. I predict that within one or two

years, after having defended numerous suits for malpractice due to the bad consequences of this custom, they will be following some other leader into a more sane and rational practice.

Gynecologists, as a class, are modest, retiring, and self-sacrificing men—these qualities doubtless being due to long and intimate association with the fair sex; but now I, as a gynecologist, think it is time to speak out, and to call to the attention of our friends, the general surgeons, a few facts. The more or less careless methods in use in many general hospitals, and the tendency on the part of many general surgeons to turn out operative work wholesale—carrying with it, of necessity, the lack of time and the lack of inclination to study the material carefully and to reflect upon the lessons that should be derived from it—will, in my judgment, never solve the problem of gall stone disease. Let me also recall to the attention of our friends the general surgeons the fact that the technique of abdominal surgery as a whole has been perfected by gynecologists. Not only is this true, but it was done in spite of the opposition of general surgeons and of threats of even such an extreme character as that the men doing this work as pioneers should be hanged, if various patients particularly in question at the time should die as the result of the abdominal surgery of these pioneer gynecologists. This was done in the case of McDowell and, many years later, in that of Washington Atlee, not to speak of other instances. In addition to this, these early gynecologists were obliged to submit to all manner of contumely.

Moreover, all that is known of gall stone surgery has been learned and taught by gynecologists and other specialists. Sims, the great founder of modern gynecology, was the first to do and to teach gall stone surgery. He was succeeded by Lawson Tait, one of the most celebrated gynecologists, by Hans Kehr, a specialist, and by Mayo-Robson and Moynihan, both specialists and gynecologists [as the position held by these men in Leeds requires them to be gynecologists; and, as Moynihan himself has told me that for many years Mayo-Robson's practice was chiefly gynecologic, and that in that practice Moynihan acted as his assistant]. These men have done more than all others combined to advance our knowledge of gall stone surgery.

Even our friend Deaver himself, who is so fond of speaking disparagingly of gynecologists on all proper and, shall I say, improper occasions, is largely indebted to the fact that for years he was an obstetrician to the Maternity Hospital of Philadelphia and was closely associated with one of the well-known gynecologists of that city, for his remarkably successful career as a surgeon. Surely the bridge that has carried these gentlemen over—the general surgeons, the nursing mother from whom they have learned what they know—should be appreciated and honored, instead of being reviled, as is now the jealous habit of many general surgeons.

In conclusion, I believe that the methods of specialists must be applied to the surgery of the bile-ducts, the pancreas, the spleen, and the intestines, in order that the problems connected with this field of surgery shall be solved.

Dr. Emery Marvel, Atlantic City.—If the battery of gynecologists against the general surgeon has subsided enough to leave the subject of gall stones open for discussion, I would remind you of the marked interest of this society and

the activity of the American Medical Association in combating quackery. Now, if there is one thing more than another that contributes to the support of quackery it is the palliative treatment of gall bladder disease. An instance of this came to my mind this winter. A man who had recently gone through an operation for the removal of gall stones said that he had for eight years been trying different remedies. That he had tried seventy-five methods of treatment—Christian Science, osteopathy and other things. He was asked why he had done this, and said because no relief had been given to him by the physicians. If Mr. Bok was right in his address charging the physician with being responsible for the perpetuation of patent medicines, it is equally true that the medical man who will palliate and procrastinate in the disease in question is guilty of the same fault. If we are true to our convictions that these so claimed remedies should be thrown aside, it is time that this one disease should be eliminated as a means of perpetuating that crime.

The discussion seems to have limited itself to gall stones. The stenosis of the cystic duct producing these gall bladder conditions is either due to the diminished caliber of the cystic duct or the presence of an obstructing foreign body within the duct. The terms gall stone disease and gall bladder disease are not synonymous; although it is true that in discussing in a general way gall stone disease, we are also discussing in a general way all diseases of the gall bladder.

Dr. Musser has said that there is no solvent for gall stones. Remembering this statement, together with the demonstration of the collection of calculi given by Dr. Harris, should we make any attempt at all to treat them with a so-called solvent? If any one thinks that there is a solvent for them, let him place the stone in a vessel and see whether he gets a solution of the calculus by means of olive oil or an other so-called solvent. With the exceptions made by Dr. Musser and Dr. Deaver, there is but one treatment for gall stones—to remove the cause, and to do it promptly.

Dr. III.—I should like to hear from Dr. Vander Veer, of Albany.

Dr. Albert Vander Veer, Albany, N. Y.—I have listened to the consideration of this subject in a number of our national associations, and we have had it up in our State Medical Society of New York; but I have seldom listened to a discussion so interesting to me as the one this morning. I did not expect to talk on this question, but I have reached that time of life when I can look back and derive a great deal of comfort from a discussion of this kind.

As the subject has been presented here, I should like to emphasize a little the question of typhoid fever as a factor in the production of gall stones. I am certain that the remarks made by Dr. Norton are exceedingly appropriate. I have found the bacilli of typhoid fever ten or twelve years after the attack, and I always take this question into consideration.

Dr. Deaver has said that he is not in favor of operating during acute attacks, but occasionally there is a case in which this must be done. I had a case of the kind, and I think it is important to report it. We have patients who come to Saratoga for the cure of gall stones, some coming from other watering places in this country and from abroad. This particular patient was a man who was receiving a high salary from his firm

in New York. He was a valuable man and had worked very hard, until he was completely worn out and came up to Saratoga to take a good rest. He had come up from New York on the night boat, and had become ill at Albany. He called in a physician, who treated him for a few days. The physician finally thought that the man was going to have typhoid fever and sent him to the Albany hospital. He went to the hospital, and he did have typhoid. On the eighteenth day I was called to see him, as he was doing badly. He had a high temperature and a chill. I found an enlargement of the gall bladder, a leukocytosis, and a rapid pulse; and the general condition was one to cause anxiety. He did not improve, and I decided that it was a proper case for immediate operation for the relief of cholecystitis due to the bacillus of typhoid. I operated, and examined as quickly as possible for stone; I then got out as quickly as possible and drained the gall bladder. The material removed was examined at the laboratory afterwards, and the typhoid bacilli were found. The patient made a good recovery, and I am satisfied that the intervention of surgery was of great benefit to him.

I held autopsies in Albany from 1865 on for fifteen years, and was surprised to find so many cases of gall stones. I was called in the study of cases of obstruction of the bowels, and occasionally found gall stones as the cause. When we first began to do operations within the peritoneal cavity, we attempted to do the operation on cases that had been left too late. I want to say, first, that I have not listened to any discussion that has given me so much pleasure as Dr. Musser's broad-minded, brave, thoughtful views, which are entitled to our respect. It has taken many years to get the family physician to believe in gall bladder surgery. Physicians would not believe that there were gall stones present, because there was no jaundice. That difficulty was overcome after a time. Surgery of the gall bladder at that time was somewhat dispiriting and depressing; but from then on surgery began to take up these cases with earnestness; so that Dr. Musser's reference is about where gall bladder medication stands to-day. There are certain cases that the medical man may treat successfully; but frequently they are the cases that come back thinking they are cured, but are not. They eventually have to have an operation or they die for the want of an operation. In some cases it may not be absolutely called for, but these cases are exceedingly few. The diagnosis is not always so easy as it might be. A family physician once sent me a case of gall bladder trouble, and I said: "I am not altogether clear that this case should be operated on at once. Let us have a consultation. Let us get together, the medical side and the surgical side, and work up the case as thoroughly as we can. Let us do it at once, and see whether the factors are in favor of operation or not. Let us make an exploratory incision." I have a record of cases in which the question between cancer and a gall stone condition was so evenly balanced that we had to do an exploratory incision.

I do not believe that we can get our patients away from the idea but that olive oil does some good. Use the sieve, watch the stools, and exclude the pseudo-form of gall stones. If the lawyer or the clergyman and his family argue that, since the patient has taken olive oil and has passed the stone, he must be well, you had bet-

ter listen to them and not do a surgical operation at once. If the patient passes other stones afterward, well faceted you can convince them that there may be more and succeed in getting them to allow you to go on with the operation. We had an intelligent practitioner who had treated himself for gall stones and said that he was well. Within forty-eight hours after making this statement he sent for a physician for acute pain. He also sent for a surgeon two hours afterward. It was found that he had a perforation of the cystic duct, and he was dead in twelve hours. The fact that he did pass gall stones ought to have been impressive enough to have allowed an operation to be done at once.

Dr. Deaver's remarks are impressive. I am glad that you have here that same sort of push from the surgeon to the specialist, and so on, as we have everywhere. My impression is, however, that these gentlemen come from outside the State of New Jersey. I am glad to see the manner in which they approached each other. Such discussions always bring out the latent strength of both sides. Dr. Deaver's remarks were the best that I have heard from the surgical side for a long time.

There are a few little things that come up to my mind regarding the method of operating. I have been accustomed, as soon as I have opened the peritoneal cavity, to get my fingers in and make a search for the gall bladder. If I find it without many adhesions, I pass my finger along the surface of the cystic duct. If I do not find a stone, I pass it a little further on to the common duct. If I still find no stone, I may try to work up under the liver, and see whether there is a stone in the hepatic duct. I say, get out as quickly as you can. Drain the gall bladder. Do not do a cholecystectomy; but if there are adhesions, follow out Dr. Deaver's directions carefully. If, in order to relieve constriction of the duodenum, or sometimes adhesions to the ascending and transverse colon, if you get one of those dreadful cases in which you have to break up adhesions—when I have done as I have said and got in behind the cystic and common duct, I have had excellent results in going down through the postperitoneal sac and making drainage there. As to drainage, certainly let the gall bladder drain as long as it will. I have not had that particular experience myself, but I have known of cases that would go on for eighteen months or two years before the wound would close entirely. If it goes on longer than this, you are justified in reopening the wound, when you will usually find a useless sac, which can be dissected out with great safety.

Dr. Philip Marvel, Atlantic City.—I rise to ask a question, rather than to enter into a prolonged discussion of the papers which have been read. It has been stated by one of the gentlemen on the floor that "there are a large number of cases that occur without any symptoms whatever"; that there are a large number of cases in which the operation is imperative, and in which none of us would make the mistake of withholding the privilege of an operation. But there are also intermediate cases; and it is to this class I particularly refer. To be more explicit, I shall divide these cases into two classes—those which are complicated by other diseases existing previous to the attack, and those which are complicated by diseases following the attack of gall bladder infection. I may say just here that none

of us would think of operating in a case of gall stone disease unless there were present either obstruction or infection with pus. Few of us, perhaps, would ever know gall stones were present if there were no infection; unless the number of stones present were sufficiently large to make a tumor apparent, and if there were a tumor, we would not always be positive it was due to gall stones. The second class is that class of cases in which the infection is so severe that few, if any of us, would be brave enough to enter the abdomen and attempt to remove the cause of the disease.

To illustrate the first class of cases, I would call attention to accompanying arteriosclerosis, with chronic and acute endocarditis and pericarditis, nephritis, ulcerative colitis, etc. When any one of these is present, it seems to me that we want to proceed with surgical assistance with considerable caution. I might interpose a question just here. When, in these cases, shall we operate? Shall the case be watched and cared for, as Dr. Musser has suggested this morning, until there is a favorable time for surgical treatment? or shall we operate at once? Should we not endanger the patient's life more by an operation than without an operation, in a large percentage of these cases; and particularly in those in which some one or more of these diseases is advanced? There is room for medical treatment in these cases, I think. Often the internist may be made acquainted with the fact that there is kidney or arterial disease by the use of the instrument for taking the blood pressure, when we could know it in no other way known to the profession today. The ablest internists are not always able to determine insidious diseases otherwise. I have, with others, examined the urine of a few patients with negative results. Yet, when we have taken the blood pressure, although we had varied decidedly in our opinions as to the tension present, we found the evidence of arterial disturbance, which subsequently was found to have been the beginning of a nephritis or sclerosis of which we could not have taken note without the assistance of the instrument.

The other class of cases I wish to illustrate by reciting the history of a case at present under my charge. During the meeting of the American Medical Association this person became ill with an acute attack of what was supposed to be pyemia of the gall bladder. There was no history of stones, but the attack was so acute that peritonitis began about eighteen hours after the onset of the attack. The evidences were so decisive and the patient so ill, that it seemed as though an operation should be resorted to. I called to my assistance Dr. Mayo, who after studying the case carefully, said: "You have done right not to operate. This case is one where surgeons want to keep their hands off. There is as yet no disease focus. No man can look within that abdomen and determine to what tissues or how far this infection has extended. If she lives, she will do so because there is no operative interference; and when she is over the attack, if the condition focuses itself, then will be the time to operate." By means of little and careful diet and proper management of the case, the patient is still living and it was not until last week that the disease began to focus itself. This case may or may not be operated on, as the patient has very strong opinions on the subject, but I am reasonably sure that if she had been

operated on at the time of the acute attack she would already have passed to her long home. It is, therefore, concerning this class of cases, as well as the others previously mentioned that I ask, "When shall we operate?"

Dr. P. A. Harris, Paterson, Closing.—Dr. Emery Marvel in discussion very kindly referred to the "steeple chart" temperature, first so-called by Moynihan. This abrupt rise and fall of the temperature is very apt to characterize the septic stage of gall-stone disease.

I purposely omitted reference to it for the reason that my paper was addressed to the general practitioner. Unless he has facilities for taking the temperature every hour or two, or even at shorter intervals, he would likely not find this interesting characteristic exemplified.

The temperature quickly goes up 3, 4 or 5 degrees above normal, and just as quickly falls to or nearly to normal, every two or three days or after longer or shorter intervals. I am glad that Dr. Marvel referred to it. If any physician is able to have the temperature in cases of gall-stone disease taken every hour or two during and following an attack of cholecystitis, he will generally find this sign exemplified.

Dr. Marvel wishes to know whether he should operate upon cases in which certain complicating conditions are found. I think that Dr. Deaver has pretty well answered this question. Most surgeons have learned by bitter experience the importance of avoiding invasion of the abdominal cavity with the knife in the acute inflammatory stages of disease. Dr. Musser has advised us to operate only when gall-stone disease "is a danger to life, or a menace to it." Any patient who is hovering around a physician, repeatedly seeking relief for colics, tenderness, continued pain, or jaundice, is, I believe, in danger; his disease is, therefore, a menace to his life, and such a case should doubtless be operated upon.

If I differ at all with Dr. Musser, it is only in that I am more fearful of the dangers of gall-stone disease than he, and I hope I may be pardoned for saying in all fairness to him who has taught us so many good things, that I believe he has given the general practitioner rather too much encouragement to pursue medical treatment. Such encouragement given to certain patients whom I have seen, in whom a diagnosis of gall-stone disease was made, and operation proposed, but not accepted by the patients, has cost them their lives within the past few years. One patient was, a few months after I saw her, operated upon in an acute attack of cholecystitis, by an inexperienced operator, with disadvantageous accommodations, and with fatal result. One patient died of perforation of the gall bladder, another of perforation of the intestine, and one of intestinal obstruction. After gall-stones have begun to cause pronounced symptoms they are a menace to life. When the attacks are oft repeated or cause continued disability, they are a great menace to life. All deaths accruing from gall-stone disease are really not known and, consequently, not so marked by the physician who certifies to the cause of death.

I confess to having seen one death from perforation of the gall bladder five years ago, in which I should not have known what produced the peritonitis which eventuated in death, had not the abdomen been opened.

The very slight mortality attending operations for gall-stone disease in the earlier stages of its

course, and the very great mortality consequent on operations for the cure of the disease after years of unsuccessful medical treatment, form the strongest possible plea for resort to operation in all cases where the habit of colics becomes fixed or the symptoms are in any other way pronounced or continued.

You will notice that some of the specimens of gall-stones which I have removed by operation and which are exhibited to you this morning were from patients who succumbed to operation.

So long as we take literally the advice of internists to temporize and resort to treatment which they themselves acknowledge is of little, if of any, service just so long will the proportion of cases in which life has been too long endangered, go to the surgeon at a time when a considerable percentage of mortality will show itself in his reports. So many of these cases hitherto have come to us as the last resort, their lives having been too long menaced by the disease, and placed in absolute danger thereby.

THE SIGNIFICANCE OF BLOOD PRESSURE IN SURGICAL SHOCK.*

By Arthur J. Walscheid, M. D.,
Union Hill, N. J.

The assemblage of phenomena, which for years we have designated as shock, has been recognized as so concomitantly connected with surgical conditions that the term has gradually been divorced from the domain of the physician to that which the surgeon claims for his own. In making this statement I do not want to be understood as saying that shock only exists in surgery, for it has been shown that shock may occur in the course of medical conditions, seen only by the physician, and that fainting or syncope is an illustrative demonstration of the verification of this theory. Travers, the celebrated surgeon, in 1826, in his treatise on Constitutional Irritation, said, "that medical and surgical shock differed more in degree than in kind." It is, however, my object in this paper to confine myself solely to the surgical division, and not encroach upon the medical man's domain, treating only, of the typical and well-known condition called surgical shock.

Surgical shock was recognized as early as 1568 by Cloes and again in 1789 by Wiese-man, John Hunter, and Garegoes, who attributed shock to the presence of some foreign body in the wound or blood. In the further advances made in the study, the old theory of suspension of nerve force and nerve energy with a paralysing effect upon the centers was the standard around which

the definition of surgical shock rallied for years. A correct elucidation of how this suspension of nerve force and paralysis was brought about was never clearly interpreted, however, and the condition of shock seemed for years to be wrapped in a cloak of mystery, explained only by a broad and indefinite theory. This definition described what the results of shock were, as apparently and symptomatically produced, but the enucleation of the physiological and underlying changes was always vague. As the subject advanced in experimental research, a new era dawned upon the progress of surgery, so that at this date a thorough knowledge of physiology and surgical physiology is as important to the surgeon as the anatomical relation of the parts he is to operate upon.

It is to the newer generation of surgeons, such as Cushing, Crile, Howell, Mummery, Wainwright and others, that we are indebted for experimental work in the physiological laboratory and in clinical surgical practice. From these experimental endeavors we have drawn conclusions sufficiently accurate to allow a more intelligent interpretation of the phenomena called shock and materially assist the surgeon in its early recognition and prevention. Based upon theories deduced from these experimental facts it has been found that a disturbance of the normal blood pressure in the individual is the factor most prominent in the production of true shock and its alteration in the slightest degree is the forerunner of the general depression. The importance of this premonitory sign is obviously as necessary to the surgeon as his asepsis, in fact more so; for the condition of the patient before, during and after an operation is the most essential point in all surgical procedures. It is not the object of this paper to give you a description of the various sphygmomanometer which are commercially presented to the profession. The time allotted is too short, and there are other more essential points to bring before you, neither is it my object to present to you, as I had at first intended, a series of experimental cases and allow you to make your own deductions. I will, therefore, come to the point at once, and deal with the practical and essential side, leaving the experimental work to those who desire to delve further into this exceedingly interesting subject.

The significance of blood pressure in surgical shock having been shown in experimental work, the questions arise: How is

*Read before the 141st annual meeting of the Medical Society of New Jersey, June, 1907.

this phenomenon brought about? What surgical physiology is at work? And what benefit is it to the surgeon and general practitioner? Before answering each question, *per se*, a general description of the normal blood pressure in man will not be amiss.

Stephen Hale's article on Statical Essays Containing Hæmostatics, rendered in 1733, gave the first demonstration of the pressure of the blood long after Harvey's discovery of its circulation. It remained for Poiseuille and Ludwig, in 1828, to introduce into physiology the Manometer; Ludwig making a further advance by contributing the Kymograph, both of which are to-day the only means at our command to aid us in recording the variations of blood pressure in all problems of surgery, medicine, or physiology. The normal blood pressure in the individual as exerted upon the vessels and in the blood depends upon four factors. First, the energy of the heart as it exerts its force through ventricular systole, discharging a certain volume of blood into the aorta. Secondly, the narrowing outlet of the capillaries or the peripheral resistance causing what is known as the end pressure. Thirdly, the tone and elasticity of vascular walls exerting its influence upon the circulation, bringing about what is called the lateral pressure, and lastly, the volume or amount of circulating blood which exists in the circulatory circuit. The smallness in quantity of this volume as compared with the capacity of the vessels, has been commented upon, and keeping the circulation controlled, and the vessels completely filled, is compensated for by a constant state of contraction of the arteries, capillaries and veins called vaso-motor tone. The abolishment of this tone or its impairment causes a dilatation of all the vessels, and the blood volume is correspondingly forced from the arteries into the veins. Even if any of these four factors are separately interfered with, they will exert an influence upon one another and a general dilatation of the whole circulatory circuit occurs, with a subsequent fall of blood pressure. The control of the tone of these vessels is under the complete influence of the vaso-tonic center in the medulla.

With a summary of this knowledge at hand we may describe surgical shock as an excessive sensory impulse or sensory concussive force sent to the higher centers stimulating them to greater activity and producing an exhaustion of the whole higher nervous system, preventing them from receiving or throwing out any normal phys-

iological reflex. The respiratory, cardiac and vaso-tonic centers not being neglected in this involvement suffer as well, and as these centers are the ones most essentially active in the maintenance of the vitality of the system and the individual, their disturbance of function is the most important in the control and relief of the condition. This activity of vaso-motor, cardiac and respiratory reflex, physiologically produces an extreme, momentary contraction of the blood vessels with an elevation of blood pressure, depending upon the etiological force. As soon as the sensory influences have subsided, however, and as soon as the centers have exhausted their reserve reflex strength the motor control to the vessels is lost; the end and lateral pressure gone; they dilate, and the blood is thrown into the larger veins where it accumulates and stagnates. The heart being attacked by vagal paresis on one side, and failure to receive blood into the right ventricle and into the coronary arteries on the other, loses its energy, causing the whole circulation to become limp and inactive. The other centers from their excessive stimulation having used up all their energy are gasping for oxygen to restore their equilibrium of function. Owing to the lowered blood pressure and loss of circulatory force which this vaso-motor depression has brought about, blood is not sent to the brain and the resulting cerebral anæmia produces the picture which we see, and call surgical shock.

In the changes heretofore portrayed it is plainly apparent that vaso-motor impairment or break down, is the key to the situation, and as the blood pressure controls the circulation which in turn controls existence, its production or loss is the important factor to consider. Even the important centers of respiration and cardiac control stand secondary in this proposition.

The above description of surgical shock by most authorities, and by Howell, is summed up in saying, "Shock may be defined as a series of events following injury, characterized by a long continued arterial pressure due to partial or complete loss of vaso-tonic activity, by a rapid, feeble heart beat, due to partial or complete loss of activity of the vagal or cardio inhibitory center and a depressing influence upon the center of respiration." Crile in his definition sums up the situation more briefly by saying: "The essential phenomenon in shock is reduced blood pressure." Both of these definitions I think only partially describe shock, for as I interpret it, they only give

the cause of the depression but do not go far enough in mentally placing the complete condition before you. To describe shock, the composite picture of stimulation, depression and effect of depression must be given. Lowered blood pressure itself will not produce surgical shock. It is the effect of lowered blood pressure upon the other centers which produces it both in continuance and fatality.

Vascular dilatation and lowered blood pressure may exist as a normal physiological occurrence and still not have any presentation of shock. It is the continued lowered blood pressure, vascular dilatation and failure of the heart and circulation to properly propel to and supply the other centers with blood which is the principal cause in the production of the neuro-paralytic picture. I think the following definition describes shock more thoroughly: "An assemblage of phenomena caused by injury, produced from a continued lowered blood pressure by vascular dilatation, causing an accumulation and stagnation of blood in the large internal veins with a subsequent cerebral anæmia and exhaustion of all the centers in the system."

This definition to my mind embodies the complete picture, is best understood, and carries with it a more thorough portrayal of the condition as presented in practical experience to the surgeon. It may vary in degree but the complete phenomena must exist to bring about true surgical shock. It substantiates the old theory "that the functions of the brain upon whose failure insensibility depends, require for their performance a constant supply of blood and when this is cut off they at once cease." This definition of shock, however, fails to describe another condition which we frequently encounter in surgical practice, whose symptoms are so closely allied with true surgical cataclysm that it is difficult without a direct history to differentiate the two. Besides being so closely allied symptomatically, the two conditions may merge into one another and form the complete picture of true vaso-motor break down. Collapse in surgery or medicine is a sudden or gradual suspension of function of the centers caused by the actual loss in volume of blood. Controversy has arisen and is still the topic of discussion, that this condition, instead of being an independent one, is merely a mild stage of true shock. I take sides with Crile on this point in so far that I believe that true surgical shock is purely a neurotic exhibition, whereas collapse is caused by a

direct influence of oxy-hæmoglobin starvation. In shock all the centers are primarily stimulated, the blood pressure is raised and the vaso-motor center becomes exhausted, lowering the arterial capillary and venous pressure and further exhausting the respiratory, cardiac and other centers, subsequently causing a cerebral anæmia. The severity of this condition depends upon the injury and individual susceptibility to nerve influence. In collapse the centers are *not* primarily stimulated, but *directly depressed*, depending upon the actual loss of blood. The vaso-motor, respiratory and cardiac, in fact, all centers simultaneously dilating the circulatory cycle and lowering the blood pressure. The longer the hemorrhage is continued, the longer will the suspension of function remain. Its return to normal depends upon the restoration of volume of blood lost, and if this is restored, the vaso-tonic center will quickly respond and act as it physiologically should. Individual susceptibility does not play any part. In shock an indirect influence is at work, inaugurated by injury, causing an excessive sensory impulse; in collapse a direct influence to the vaso-motor center either from direct injury causes depression; or from hemorrhage gradually extracting from the individual the medium by which the maintenance and vitality of life itself is sustained. The symptoms of shock or collapse may be closely allied, but I have yet to see a case of true surgical shock herald its approach by the much feared and much dreaded appearance of fainting or syncope. Taking these facts into consideration they form the best basis of sound contention that there is a difference between shock and collapse. Furthermore, experimental work has shown that in cases where hemorrhage is a prominent factor, stimulation without saline is as good as useless, whereas in collapse intravenous transfusion given alone is sufficient to raise the blood pressure and sustain the function of the centers. Then again it has been experimentally proven that saline given alone in true neurotic surgical shock raises the blood pressure, but its effect is non-sustaining unless some vaso-mural contracting medication has also been administered. When we take into consideration the difference in treatment and their physiological dissimilarity we may consistently classify shock and collapse under two headings; the one neurotic in its influence, the other hemorrhagic. I present herewith two cases distinctively different in etiology and yet having the same symptoms. I wish to call

particular attention that in the first case I refrained from giving any medication, using saline only, and attempting it in the second I would have lost my patient had I not exhibited the vascular contractants.

CASE NO. I. Post-Partem Hemorrhage. Third child. Forceps. Delivery after protracted labor, due to uterine inertia. Hemorrhage due to uterine atony. Patient was bleeding profusely. Pulse 140, rapid, weak and thready; recurring attacks of syncope and presenting unusual picture of hemorrhagia activa. Blood pressure taken by attendant registered 80 m.m. Administered hot saline with acetic acid as a douche at a temperature of 115°. After using four quarts the uterus contracted and was firmly held in place by the nurse. The foot of the bed was raised as was consistently comfortable with respiration. Limbs were bandaged tightly, and a tight abdominal binder was applied. The bandage on the left limb was now removed and 2000 c.c. of saline at a temperature of 120°, as suggested by Darbawn, was to be thrown in the internal saphenous vein. Raising the bag as high as possible to throw the solution into the vein with greater force, the stop-cock was opened. As soon as the force of the saline had been added to that of the circulation the pulse responded, becoming full and regular; pressure gradually raising. As it became stronger the bag was correspondingly lowered. After fifty minutes the patient seemed like herself and saline was discontinued; 800 c.c. only had been used. The blood pressure registered 125 m.m., pulse 100 full and regular; respirations 29. Reaction had been established. The uterus was kneaded gently for about one hour. Blood pressure did not change during the night and was taken every three hours. The next morning blood pressure was 125 m.m., pulse 115, full tension and regular. Patient made an uneventful recovery.

CASE NO. II.—Man, age 32; struck by railroad train while walking on tracks. No bones broken and apparently suffering no other injury but profound surgical shock. Pulse 152; small, rapid; all respiratory muscles brought into play with light action; abdominal breathing most pronounced; physique excellent, and muscular development good; mind not clear; contusions along the spine; blood pressure 80 m.m.; saline infusion given as in the above case; pulse responded, but not with good tension. After eighteen minutes blood pressure was taken and mercury column registered 120 m.m. Saline was still continued when twitching of

limbs, as if development of convulsions, was noticed. Saline immediately discontinued; 200 c.c. had been administered and twenty-five minutes had now passed. Blood pressure registered 115 m.m. Ten minutes later the pulse became perceptibly weaker and the apparatus registering 105 m.m. shock was returning. Adrenalin 30 m. and 30 m. ergotole were now given by hypodermic with gr. 1-50 of digitalin. A hyperdemoclysis of saline was thrown into the axillary edge of the left pectoral muscle. The pulse showing signs of improvement, slowly and steadily increased in volume under the saline adrenalin, etc., and at the completion of the administration of 200 c.c. more of saline and another 20 m. of ergotole the blood pressure rose to 125 m.m. Reaction had set in and at 5 P. M. patient showed a pressure of 130 m.m. Reaction now being complete, 20 m. ergotole was continued every three hours until the next day. The patient made an uneventful recovery and a few days later showing the discoloration of extensive spinal contusions. He was discharged from hospital fourteen days after admission.

It is not very often that such rapid results are seen, for the erratic action of saline in its rapidity of raising blood pressure individually varies, making it really difficult to present a series of selected cases. These two, however, fortunately occurring as they did plainly indicate that not only in physiological transmission does shock differ from collapse, but that the treatment in the former is maintained by a vascular contraction plus saline, while in collapse the saline alone is sufficient to restore to the centres their vitality. In substantiation of this theory it will be noted the rapidity with which reaction set in, in the first case after 800 c.c. of saline had been given and the fact of the patient regaining her vitality, while in the second the saline raising the pressure *temporarily only*, and as soon as the volume of blood was interfered with the muscles showing signs of twitching, when upon cessation of saline the pressure began falling again. Further administration of saline meant death and only after vaso-constrictive medication did the patient regain his reaction. It has been my experience in the exhibition of saline in shock to administer the saline until the pressure shows signs of an upward rise, then to cease the infusion or hyperdemoclysis, whichever the case may be, continuing the treatment of the condition by giving most attention to the vessels. In one or two of my early cases I can ascribe the

death of my patient to the prolonged continuation of saline after untoward symptoms became apparent.

Of what benefit is all this to the surgeon and general practitioner? Is not the trained eye of the operator sufficiently alert to detect the slightest change in the patient's condition? All of us have been confronted with the condition of shock or collapse, and many of us have operated with one eye on our work, the other on the patient, being in constant fear of an explosion of nerve force. Yes, the trained eye of the operator is sufficiently alert to detect shock and note the change in the patient's condition, but the study of blood pressure goes many steps before these symptoms present themselves. The prognosis of shock depends upon the existing degree of profundity, and this is exactly what the sphygmomanometer shows. It is the watchdog of the vaso-motor apparatus, and at the slightest alteration of pressure the anæsthetist is made aware of it and is in a position to combat the occurrence of shock by proper and intelligent administration of remedies. Then, again, the study has shown that sensory impulses are the ones to be dreaded and this has stimulated the surgeon to further advance his anatomical knowledge by combining it with physiological experiments as to the location of sensory nerves, so that in operative procedures he is able to tell with reasonable certainty what effect manipulation of each tissue will have upon the nervous system, and what the records on the pressure chart will be. With this knowledge and training the avoidance of rough handling and unnecessary manipulation of tissues is apparent. The cases for operation will be selected and the anæsthetic chosen in accordance with the condition of the patient and the area to be subjected to operative interference. And lastly, the operation will be performed with an individual freedom of mind which heretofore did not exist.

This clinical observation of blood pressure in surgical conditions has only in the last few years become prominently associated with shock, and it is to Cushing and Crile that we owe the various contributions upon the subject. It is strictly an American institution and to these men credit is due for placing the study upon a substantial surgical basis.

In the observance of blood pressure not only in surgery but also in medicine, due consideration must be given to the proven fact that there is no normal blood pressure in any individual which can be taken as a

standard and suffice it to say that the variations influenced by diet, worry, exercise, change of posture, sleep, etc., bring about in the vast majority of adults a systolic mean pressure between 125 m.m. and 130 m.m. with a 12 c.m. armlet and 140 m.m. and 150 m.m. with a 5 c.m. armlet; after middle life 130 m.m. to 145 m.m. with a 12 c.m. armlet. The diastolic pressure will be 25 m.m. to 40 m.m. lower in children, 90 m.m. to 110 m.m. after the second year, 75 m.m. to 90 m.m. before it. Women usually have a lower pressure and average about 115 m.m. In my own experience in taking blood pressure on 175 railroad men recorded during examination, I found a mean average of systolic pressure of 125 m.m. to 135 m.m. the general rule.

In traumatic conditions a pressure at about 100 m.m. may be designated as mild shock, at or below 90 m.m. medium, and at or below 75 m.m. profound shock. Personally I have never seen a case of pressure below 65 m.m. recover. The happy result of reaction depends upon the degree of shock, but if shock is firmly established, I believe with Darbawn that it is incurable. A vaso-motor centre once exhausted to a profound extent can never regain its equilibrium. The blood pressure may be raised and the circulation be brought into activity, but the effect is not sustaining and the vessels do not retain their tone. As soon as the effect of the mechanical force of the saline and the effect of the medication has subsided the vessels dilate again and a condition which is called secondary shock occurs. With a knowledge of these facts before us, the close observation of blood pressure during operations and a knowledge of the anatomical location of extremely sensitive sensory areas is not only important but essential to the armamentarium of the up-to-date surgeon. The present status of the condition is not its fear of occurrence and treatment, but its prevention and treatment before it occurs. To epitomize the many experimental cases illustrating the truth of these remarks is less important than classifying as briefly as possible those areas which are likely to result in shock when attacked. The instrument which I used for the work was Cook's and Brigg's modification of Riva-Rocci, Gaertner's tonometer and Erlanger's improved sphygmomanometer. The latter I found the most accurate and with an attached kymograph I made a graphic record on a revolving cylinder, taking the pressure every ten minutes, covering periods of primary incision, sponging, walling off,

separating adhesions, flushing, suturing, amputations, nerve stretching and nerve section. In all primary incisions the pressure rose about 10 m.m. to 15 m.m. The administration of ether alone caused a rise of at least ten points, which allowed the other five points to be due to sensory stimulations. When shock already existed this rise was absent and there was always a marked fall in the blood pressure which continued unless treated. This primary rise lasted about ten minutes, then dropped; the pressure oscillating around the normal point until some sensory nerve was encountered which by stretching or manipulation caused a marked rise or upon crushing with hæmostatic forceps or section a marked drop. In amputations I was struck with the drop in pressure on section of nerve trunks; upon rapid section of either the sciatic, brachial, ulnar or median nerves and rapid traction for high section I noticed less drop than in cases which for experimental reasons I prolonged in severing. In sawing bones I was strongly reminded of the existence of sensory nerves in a thigh amputation, when, upon incising the periosteum and slowly retracting it, a sudden drop in the blood pressure was noticed, the patient being prevented from going into shock by the hasty injection of a one per cent. solution of cocaine into and around the periosteum, blocking any further impulse and treating the shock by adrenalin and ergotole.

In abdominal work the study of blood pressure has brought to light facts making cœliotomy an operation still less dreaded than heretofore. In making the primary incision a rise was always noted which held its own until the peritoneum was reached. Upon incising this tissue the pressure fell and upon every manipulation, such as sponging, wiping, pinching, flushing, washing, the pressure would fall correspondingly and continuously as long as the peritoneal handling was kept up. In severe cases where there already existed severe septic shock from peritoneal absorption, it was noticed that there was a marked fall of pressure, which, notwithstanding stimulation, decreased steadily until death took place. Of course this was controlled by the amount of sepsis. In manipulation of the intestines or viscera there was no decided alteration but upon traction on the mesentery and parietal or posterior peritoneum there always occurred a decided fall. In studying head injuries, shock showed the usual fall of pressure, but if instead of reaction the pressure gradually rose to 200 m.m. or 300

m.m., either a depressed bone, clot or some cerebral pressure was found, or if not present, fracture of the base was diagnosed which in all cases proved true by the symptoms characteristic of this condition developing after a number of hours.

Case III.—Tunnel worker. Cephalohæmotoma over right parietal area, shock, blood pressure 90 m.m. in stupor and dazed condition. Admitted at 7.30 P. M. At 10 P. M. blood pressure recorded 160 m.m., at 11 P. M. 180 m.m. Taken at 12 o'clock midnight, 200 m. m., and began to show focal symptoms. Trephining located depressed fracture and clot over right area and parietal lobe. Post-operative pressure one hour after 110; probably due to shock produced from operation. Adrenalin and ergotole with saline by high enema proved effectual and pressure was raised to normal standard. Next morning his condition registered a pressure of 135 m.m. with pulse of 115. Focal symptoms had entirely subsided. Patient made an uneventful recovery. In an elevated blood pressure of 190 m.m. to 200 m.m. or over in head injuries we may safely diagnose fractured skull or cerebral hemorrhage. In breast amputations the skin incision caused a slight rise of pressure, but there was no further interference until the axillary nerve trunks were disturbed in cleansing the axilla. The pressure then showed a tendency to drop depending upon the amount of manipulation the plexus was subjected to.

The production of shock being strictly controlled by nervous impulses, the study of its prevention has brought forward a line of treatment known as "nerve blocking." This consists in injecting a nerve trunk above the area of operative interference and blocking the sensory impulses. Experience along this line has been very successful.

Case No. IV. Railroad brakeman. Right leg crushed and mangled. Shock profound. Pressure 75 m.m., treatment caused elevation to 90 m.m. Immediate amputation with nerve blocking of anterior, crural and sciatic with one per cent. solution of cocaine. Amputation performed painlessly below the knee and patient kept from mental shock by moral suasion. Recovery uneventful.

It is also very interesting to note the existence of profound shock which always follows railroad injuries. I have found in every case of railroad accident when the bones were mangled and crushed that the fall in pressure was always lower than in practically the same tissue injuries without

bone injury. This, of course, one would expect, but the presence of such severe center break down as these injuries invariably show, the extremely profound shock into which these cases go brings up the question, whether the periosteum is the transmitter of the exhausting stimulation or whether the sensory impulses are carried from the Haversian cells themselves.

I have not yet had the courage to attempt the injection of epsom salts into the axis cylinders similar to the method employed in Melzer's cases of spinal analgesia, but I see no reason why it should not block as effectually in the individual nerve as it does in the spine.

Contrary to old theories we now may safely amputate by nerve blocking notwithstanding the degree of shock. A continuous cataclysm of sensory impulses arising from a mangled and crushed limb indicates but too plainly the necessity of its immediate removal.

The treatment of shock at the present time is exhibited in accordance with these theories of vascular dilatation with lowered blood pressure. The arterial and general vascular contraction causing elevation of pressure has been found to be the best means of reestablishing normal conditions and hastening reaction. The normal pressure as was shown is primarily controlled by the vaso-motor center, and through the vaso-tonic nerves the end and lateral pressures are sustained. Experimental research has shown that the medullary substances of the adrenal bodies called Epinephrin hydrate or adrenalin has a marked effect upon the circulation. Briefly told, the physiological role of the adrenals is the automatic influence of vaso-tonic control to compensate for the wear and tear produced by the inherently natural and psychical exhaustion of the vaso-tonic center from the strain and worries of every day life. In a condition of shock this pathological exhaustion prevents the gland from performing its function and the walls of the vessel receiving no automatic reinforcement, remain dilated. What more rational treatment could be instituted than the introduction into the system of that which it is now deprived of? Adrenalin therefore has become the best and most efficacious remedy in the treatment of shock. Having theoretically replaced the gland product, we go still further by administering medication which therapeutically we know will act directly upon involuntary muscle. Ergotole and digitaline rank first in this selection. The vascular system now being

controlled our attention is turned to the center itself. Here we have an organic involvement in the form of impaired or complete loss of function. Is it not the most rational procedure not to stimulate it any further and prolong its exhaustion? It has been experimentally proven and I have myself found that the administration of strychnine in the presence of a condition of this kind does absolutely no good, but on the contrary does a great deal of harm. Stop to consider for one moment the physiological action of the drug in the spinal, motor and center tract, and then map out in your mind the pathology of shock. If every symptom is not a contra-indication for the exhibition of the drug, then certainly we have long misunderstood its action. It will be like driving the proverbial jaded horse until it drops. Physiological rest is what the centers want, and as the blood pressure is controlled by vascular contractants it raises and gradually carries with it the only medication they need—oxygen. Now in looking at the vascular system! The vessels, as said before, are limp and inactive. Is it rational treatment to exhibit here any medication which will still further dilate them? Surely no one but an empiric would say yes! And yet for how many years have we been pumping glonoin and alcohol into our patient's veins.

It is but too obvious how the study of blood pressure has completely changed the line of treatment. Where for years we have been treating by an inundation of stimulating force, we now have simmered the system of therapy down to the exhibition of three drugs; adrenalin, ergotole and digitaline; their administration based upon sound and substantial physiological argument. In this passive and simple way the treatment of shock confines itself to a classification of medical and mechanical administration with the application of heat. The method of adrenalin medication is 15 m. to 30 m. frequently given, as the drug is very evanescent, quickly absorbed and fleeting in its action. It may be given alone or with ergotole and saline. Crile recommends a method of lowering the head and filling the nasal passage with 30 m. of adrenalin, given in two-drop doses, taking one-half minute to drop the medication into the nose. Its action he claims (and I have found it so) is more lasting and prolonged. The effect of adrenalin should be carefully watched, as overstimulation may be the result. It is a pity that the knowledge of the drug and its action is so limited. Ergotole is given in

30 m. doses by hypo and repeated every three hours. Digitaline in one-fiftieth grain doses, repeated like ergotole. Saline is administered in three ways, by enema, hyperdymoclysis and venous infusion. Muscular tissue contracts more readily under the influence of high degrees of temperature, so saline should be used at 120° Fahr.; if given in a venous infusion.

By enema saline is either administered thrown high into the intestine or as Murphy suggests, by a continuous rectal irrigation with a Kemp, the syringe not kept at such a height as to make the bowel intolerant. Kelley uses an infusion or transfusion at a temperature of 110°, throwing it into the subcutaneous tissue. I find the best results by injecting it over regions rich in glandular tissue, the absorption being more rapid and the effect more prolonged. A continuous infusion or transfusion may also be instituted by syphonage. The effect of saline should be watched as carefully as of any drug, as sometimes serious symptoms such as heart failure, restlessness, convulsions and death follow its use. Its action is purely a mechanical one, in collapse replacing the volume of blood lost, and in shock the force of the infusion acting upon the stagnated blood, stimulating the energy of the heart and the flow of the circulation. If, therefore, in cases of shock too much saline is administered the normal volume of blood is increased and the effect is more deleterious than beneficial. Its mechanical action is assisted by raising the foot of the bed as high as consistent with the comfort of the patient, causing the blood in the large veins to gravitate more readily into the right ventricle and coronary vessels. The venous infusion is given at a temperature of 120°, and two quarts being prepared for use. The internal saphenous vein which, acting under Darbawn's suggestion, I use, is opened and the solution is thrown into it. The bag is held as high as possible, the pulse usually responding immediately and the blood pressure becoming elevated. As soon as the pressure has reached at or near the normal point, I discontinue its use, and devote all my attention to contraction of the vessels. In extremely profound cases where I desire rapidity of action I throw 30 m. of adrenalin into the vein with the saline. The result that we are after is the supplying of the brain with blood and the stimulation of the centers into activity. To assist the circulation in first making its impression upon the brain, and when reaching there to remain at the centers for sufficient length of time

to nourish them, mechanical pressure is made on the extremities in the shape of bandages from toe to hip and from finger to armpit, or applying the rubber suit as originated and suggested by Crile. A tight abdominal binder is also applied to keep the internal veins under control.

In the preparation of this paper I realized the extensive possibilities of taking up more time than was allotted to me by the Society in its oratorical deliverance. To do justice to the subject, however, I could not confine myself to the selection of only important theories, but was compelled to lay stress upon experimental research, treatment, etc., to place before you more clearly the extremes to which the converse teachings of shock has gone, as compared to ideas existing only a few years hence.

IODINE AND SOME OF ITS USES IN SURGICAL WORK.

John Egerton Cannaday, M. D., of Hansford, W. Va., has a paper in a recent issue of *American Medicine*, of which we give the following abstract:

Senn, in his recent trip among the Esquimaux, noted that iodine is liberally incorporated in the food of these people. He observed the remarkable absence of tumors of all sorts, the exceedingly benign course of syphilis, the absence of enlarged tonsils, lymphatic glands and goitre. He attributes this immunity to their use of iodized food. Sternberg, Senn, Koch, Schill, Fisher, Behring, Tavel, and more recently Kinnaman, have emphasized the value of iodine as an antiseptic. It is certainly the most powerful as well as the least harmful germicide we possess. Kinnaman has performed an unusually elaborate and careful series of experiments with a view to the determination of the actual antiseptic value of the drug. He made use of a solution containing iodine 2.5 gm., sodium iodid 5.5 gm., sterile water 250 cc., making 1-100 solution. A 1-100 solution of mercuric chlorid acting on a culture of streptococcus pyogenes for fifteen minutes showed a great deal of inhibitory power for the first day, but allowed a good growth of streptococci to appear. An exposure of thirty minutes, however, gave no growth. The superiority of iodine is readily evidenced by the fact that a comparatively weak solution (0.2 per cent.) killed the streptococcus after two minutes' exposure. To iodine the staphylococcus is far more resistant than is the streptococcus. While it takes a 1-100 solution five minutes to kill the former, a 1-500 solution is fatal to the latter in two minutes. Dr. Kinnaman's conclusions are that, in a solution of iodine varying from 0.2 to 1-6 per cent., we have a germicidal agent of marked potency. Its bactericidal power is far superior to mercuric chlorid, the acknowledged leader of all antiseptics.

The author reports a case of multiple tuberculosis abscesses of the muscles of the chest and back treated by repeated injections of iodoform in olive oil in which the results were most gratifying. He calls attention to the fact that the injection of the emulsion into the joint is naturally followed by a rise of temperature which may last

for several days. The iodoform gauze treatment of puerperal sepsis introduced by the late Dr. Pryor, of New York, is commented on most favorably. The method is considered to be unassailable from a deductive as well as a resultant point of view. Pryor packed the uterus and the retro-uterine space with iodoform gauze after thorough curetting and irrigation. The iodoform gauze filling of von Mosetig-Moorhoof has been found to be a most valuable adjunct in the treatment of the circumscribed chronic osteomyelitis. Aumond and Bonnaire use the following formula for an irrigating solution: Iodine 3 gm., potassium iodid 6 gm., water 1,000 gm. They make use of the pure tincture as a local application prior to curetment as a means of partially sterilizing the inside of the uterus. Many of the old-time gynecologists were in the habit of making an application of the plain tincture to the inside of the uterus after curetment. Iodine in weak solution as an irrigation is of such value in the treatment of suppurative conditions, as suppurative arthritis, abscess, empyema, etc. The author has several times used a one per cent. solution in the treatment of suppurating sinuses and wounds with the result that there was a prompt disappearance of pus and an abundant formation of healthy granulation tissue.

It must not be forgotten that, although iodine is the most harmless of antiseptics, it and its compound iodoform are active agents and as such should be used with caution. They are, under circumstances, powerfully toxic. It is after injection into cerous cavities that the most serious results are seen. The pyogenic membrane lining the tuberculous or pus cavity seems to possess the power of immunity to a marked degree. The old and enfeebled patient will be much more susceptible to the poisonous action than the more robust. It is a well-known fact that an individual suffering from septic infection will tolerate much more iodine without the symptoms of poisoning than one under normal conditions. Rarely there are found persons having so marked an idiosyncrasy for iodoform that it will act as a poison when exhibited in the usual manner in small amounts. The writer uses a one-half of one per cent. alcoholic solution for purposes of hand disinfection preliminary to operative work in all cases in which rubber gloves are not worn. The same solution is made use of in the preparation of the site of the operation incision. Rubber gloves are worn as a routine measure in operative work, but in a certain number of these cases gloves are undesirable; again, in an occasional septic case, a glove may be punctured or torn, and the operator feels the need of some reliable antiseptic for his own sake as well as for the protection of his future patients. The use of this solution simplifies the technic and saves time. The method practiced is as follows: First thorough scrubbing with nail brush, green soap and running hot water, going over the hands in a systematic and methodical manner, taking each part in its turn and always following the same order as to skip no part. Particular attention is paid to the nail folds subungual spaces, and the skin between the fingers. Short clipped nails should be cleaned with an orangewood stick, the hands scrubbed again, washing off the soap in running hot water. Remove the residue of the soap with 70 per cent. solution of alcohol, immerse in iodine solution for five minutes, rinse in sterile water. The light-brown stain can be removed by washing in dilute ammonia water after operations, or if left

alone will soon disappear. The results clinically of this method have been superb. In a long series of cases no infection attributable to the hands has occurred. In conclusion, the author states his belief that iodine constitutes a near approach to a perfect antiseptic, in that it is nontoxic in effective strength, being one-fourth as poisonous as mercuric chlorid though many times more valuable as a germicide. It does not coagulate albumin or form inert compounds with the tissues. It possesses great penetrating power, is easily prepared and is stable. A solution of iodine is the most practicable chemical agent we have for the sterilization of the skin.

ALKALOIDAL MEDICATION.

Let us take the hint offered by standardization of our pharmacopeal fluid medicines, and the subsequent changes in their strength, authorized by the late pharmacopeia and adopt the alkaloids and active principles themselves as our form of medication.

Standardization was a step in the right direction, but it did not go far enough; it fixes the strength of the principal alkaloid of the preparation, but leaves out of consideration the other alkaloids and active principles the preparation may have. Most plant drugs have two principle alkaloids, the one being therapeutically opposed to the other. A typical illustration is furnished in the medicinal preparations of jaborandi; they are standardized for pilocarpine content alone, while the jaborandin may be so potent in the preparation as to nullify the pilocarpine. When we prescribe ipecacuanha, the emetine action is what we hope to get, while the cephaline content gives our patient a disagreeable headache. Opium has nine distinct alkaloids, but its medicinal preparations, in tincture, fluid extract and powder form are tested for morphine content only; thebaine, one of these alkaloids, should never be prescribed under any guise—it is a tetanizer. The alkaloids are convenient, of permanent strength, and economical; their simplicity of construction renders them easily soluble—especially their salts, which form the bulk of this form of medicine—and therefore readily absorbable. To be sure, ready absorbability of any form of medicine requires a properly prepared absorbing surface; if that surface is the alimentary tract, it must be cleaned out, and many times the use of intestinal antiseptics is profitable; we have the sulphocarbolates, acetozone and alphozone, and in case there is a need of a local stimulant to the intestinal mucous membrane we have the mentholated sulphocarbolates, or a few drops of oil of cinnamon in a pint of water, and a teaspoonful of the mixture given the patient frequently will serve a good purpose.

The greatest mistakes we make in our treatment of the sick is the inadequacy of the preparation for the rapid absorption of medicine; the lumen of the bowels must not only be cleaned, but the process of cleaning must be extended to dissolving out the heterologous protein of digestion from the villi and interstices of the bowel wall.

It is in the bowel wall that the amino-acids—the simple units of properly digested proteid food—are reconstructed into complexer substances, homologous with the hosts tissues, hence the necessity of a clean, pristine condition of the bowel wall. Reconstruction of the elements of the fats and carbohydrates is also enhanced thereby. Bad digestion, from whatever cause, results in the improper reconstruction of the amino-acids,

so that but a minor part of the protein is reconstructed into the pabulum proper, and leaves the remainder of the hybrid and heterologous variety of reconstruction; for a time, the heterologous, absorbed protein is partly converted into protein fit for nutrition by a vicarious action of the tissues, but all vicarious functions are necessarily limited in power and duration and the unphysiologic individual soon falls to storing these foreign substances in the tissues as leucomains, there to remain till some accident or medical interference resolves them out of their storage place to meet an environment in the blood or body fluids, that will convert them into a benevolent or poisonous entity; inexplicable cures of grave diseases are caused by the benevolent rounding out of leucomains, while most of the sudden deaths of active middle-aged people are caused by the sudden precipitation of a poisonous leucomain into the blood; most sudden deaths of middle-aged and older people in the convalescent stage of an infectious disease are from the same cause. The benevolent rounding out, and the neutralization of leucomains is what we do by giving the proper vegetable and cadaveric alkaloids.

JAMES BURKE, M. D., Manitowoc, Wis.

MEDICAL ARTICLES FROM THE DAILY NEWSPAPERS.

REPORTS ON THE TRENTON TYPHOID.

(From the N. Y. Daily Tribune, Oct. 12.)

There come to hand in the columns of *Engineering News* two interesting reports on the recent epidemic of typhoid fever in the New Jersey State Hospital for the Insane at Trenton. Upon that disastrous outbreak we have already commented. The two reports are of high authority, one being made by a committee of the State Sewerage Commission, assisted by Professor Phelps, of the Massachusetts Institute of Technology, and the other by Dr. Henry Mitchell, secretary of the New Jersey State Board of Health. Either would in itself be of much interest. But the highest interest appears when they are considered together, and it arises from the fact of their outspoken, emphatic and diametrical disagreement.

The investigations of Professor Phelps were elaborate and painstaking. Examination of the water of the spring from which the hospital got its supply showed it to be contaminated with typhoid germs, and when certain dyestuffs were poured into the nearby sewer they presently made their appearance in the spring, thus conclusively indicating direct connection between the two and a possibility, a probability, and to some minds a certainty, that the sewer was the source of the spring's contamination and that the spring was the source of the fatal contagion. "With the conditions as above described," concludes the report, "we have not far to seek for the cause of the epidemic . . . All point conclusively to the water of the spring as the primary and main source of infection. . . . The wide distribution of the cases precludes the theory of any local causes of contagion." Professor Phelps added the opinion that the later cases of the disease were transmitted by direct contagion.

Dr. Mitchell's report, of a little later date than the foregoing, recognizes the fact that "suspicion was at first directed to the water of this spring as the medium through which the infection was spread." That suspicion, however, he seems to regard as unfounded. "In the light of later developments," he declares, "it now appears impos-

able that the spring water, had any effect whatever in conveying the contagion, and we are led to the conclusion that the disease was transmitted directly from patient to patient and through the agency of utensils and food infected within the building." He concludes his report with the reminder that "the disease finally subsided when all susceptible persons who were exposed to the infection had suffered an attack." That is much like reporting that a disastrous conflagration ceased when everything that could burn had been burned.

"Who shall decide," asked Pope, "when doctors disagree?" Far be it from us to rush in rashly. But certainly we have read to little purpose the results of the best scientific investigation and study of recent years if it is prudent to disregard a water supply which is contaminated with typhoid laden sewage as a possible source of infection when an epidemic of typhoid appears. And we cannot avoid thinking it an unworthy counsel of despair to suggest that at this time of the world, with all the results of bacteriological and sanitary science at our command, the only way in which typhoid can be dealt with is to let it rage until every non-immune person in the community has sickened with it. That seems to have been the course pursued at Trenton, and in that is the strongest condemnation of the management of the institution.

PREVENTIVE MEDICINE THE MEDICINE OF THE FUTURE.

(From the North American, Philadelphia.)

A notable address by the distinguished English physician and scholar, Sir James Barr, was delivered recently before the congress of the Royal Institute of Public Health, of which he is president. He took for his text, "Preventive Medicine the Medicine of the Future," and preached a crusading sermon against the attitude with which too many people are content to contemplate a vast amount of preventable disease and self-inflicted national degeneracy, and he did not spare that curious perversion of "Religion" that attributes to the will of God the results of our hygienic and genetical shortcomings.

The London Lancet reports him as saying that in interesting himself in preventive medicine he was not opposing his professional interests, for "as long as people are alive there is a chance of making something out of them, but once they are dead the interest of the medical man ceases, except from a pathological standpoint, or, in the aggregate, for statistical information." He then proceeded to unfold his main contention that the reason why the successes of sanitarians have been limited is because they have devoted so much attention to the prevention of zymotic disease and the preservation of life, rather than the improvement of health. If medical men would deal with physiological conditions as well as pathological, and tell patients how to keep well and not merely how to get well, they would get more patients.

This is a very pretty theory, but we are not able to indorse it fully, declares the Lancet. If there were a real demand for information as to the rules of health on the part of a large number of people, we may be sure that our profession would be only too pleased to supply them; the trouble is to get even those who are ill to follow the dictates of reasonable authority as to their mode of life, unless they be actually suffering some pain or other subjective reminder of their condition.

If, however, the profession as a whole would more firmly impress the vital importance of prophylactic personal hygiene upon all and sundry as readily as it has, since the decline of Greek medicine, dealt out drugs to them, the public demand for advice on the best manner of living, in order to prevent disease, might become as general as has the clamor for physic to cure it.

Sir James Barr devoted some attention to political matters, especially urging that before granting pensions to old people it is the duty of the nation to provide for the adequate nutrition and hygiene of its nursing mothers and young children, and to see that its school children are properly fed before any attempt is made to teach them, while it might well leave to individuals the care of their own old people. He quoted Lord Beaconsfield to the effect that "the public health is the foundation on which repose the happiness of the people and the power of a country. The care of the public health is the first duty of a statesman." He considered that if the nation will only do its duty in this matter, there will speedily follow a check to the diminution of the birthrate, and, what is of more importance, a marked decline in the infantile deathrate.

We need not enter into his discussion of the latter subject, as it has been so often before our readers, although it cannot be too often restated to the public with such force as Sir James Barr knows how to infuse into his utterances. He paid a handsome tribute to the personnel of the navy and the army as the flower of English manhood and the hope of salvation of the country, and extolled the military training as the best means of insuring national health and physique.

Passing to the question of physical deterioration, he favorably regarded Dr. Rentoul's drastic proposals to prevent the propagation of the race by the unfit, and he expresses his views that heredity has much more to do with the welfare of the nation than those who so strongly proclaim the all-important influence of environment are disposed to allow. He agrees, in fact, with the transatlantic counsel, that a man cannot be too careful in the selection of his parents. He is much concerned at the deafness of our legislators to the report of the committees on physical deterioration, to the opinions of which he gives his full support.

He is able to find some consolation in the national outlook on the distaff side, and remarks: "I have great faith in the British women, the potential mothers of the next generation. They do not show so much deterioration, except in the very lowest strata, as the men, and in the upper and middle classes the girls of to-day will bear a very favorable comparison to their mothers and grandmothers." The last half of the address consisted of an examination of the increase or decrease that has taken place of recent years in the deathrate from various diseases.

After giving credit to sanitary science for the decline in the ravages of tuberculosis and many of the specific infectious disorders, he called attention to the fact that there has not been a corresponding diminution in deaths from those that more especially affect children; but his chief indictment was against the apathy that exists concerning the enormous yearly loss of life from pneumonia, which, with the observance of proper caution, might be a much more preventable disease than it is considered to be. He dwelt also on the wide score for preventive medicine in guarding against diseases of the heart, kidneys

and blood vessels, which are on the increase, owing, "no doubt largely to greater wear and tear, more worry and anxiety in life."

It is in this sphere undoubtedly that the preventive activities of the general practitioner should find their scope, and we consider that Sir James Barr has done good service in calling attention to the matter. He concluded a fighting speech by again asserting that he was concerned with the efficiency of life, and not merely with a useless longevity, and that the maintenance of the vitality and manhood of the nation is the true aim of medicine. His last word was for the surgeons, whose very existence he ascribes to the inefficiency of true preventive medicine.

DR. FLICK ON THE "WHITE PLAGUE."

(From the Philadelphia Ledger.)

Dr. Lawrence F. Flick, director of Phipps Institute, is home from Europe, where he attended two international congresses on tuberculosis. Basing his assertion upon reports from every civilized country, he declares that the "white plague" is doomed, and that within a short time it will disappear from among the scourges of humanity.

"It is as clear as daylight," declared Dr. Flick, "that science can stamp out tuberculosis. Much can be achieved in the cure of the disease itself, but the most hopeful work has been done in the direction of prevention. From every country in the world I have heard scientists tell of the good already accomplished; of new methods of attack, of campaigns of education among the people; of government, State and private aid for prevention, treatment and investigation of the disease, and from every direction come hopeful, confident reports. In two huge assemblies not a single pessimistic note was struck."

Dr. Flick attended the Congress of the International Association for the Study and Prevention of Tuberculosis, which met in Vienna, and the International Congress on Hygiene and Demography, which assembled in Berlin. Both Congresses were under State patronage, four hundred delegates to the former having been guests of the Emperor of Austria, and the fourteen hundred delegates to the Berlin gathering having been guests of the German Empress.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA—ANNUAL MEETING.

(From The Philadelphia Record, Sept. 26, 1907.)

READING, PA., Sept. 25.—One of the most important meetings ever held in the history of the State Medical Society was that of the House of Delegates this morning. The formal opening of the war on the osteopaths was made with the resolution to have the proper committee present to the State law body a bill for a single Board of Medical Examiners instead of the present three-board system. The sentiment of the meeting was that the osteopaths or any other of the various kinds of alleged physicians will be recognized as doctors only if they can pass the single-board examinations, the idea of the bill being to keep the ignoramuses out of the profession. Some of the doctors kicked at the idea of having them admitted as doctors under any condition, but they were overruled.

The meeting was called to order with 482 delegates present. The informal talking on the war against the osteopaths had borne fruit, and they were all anxious to have a voice in the preliminary planning.

A resolution presented from the Allegheny County Society regarding the abuses of undue publicity of material collected by the Bureau of Vital Statistics was reported from the business committee, recommending that all possible precautions to prevent such abuses be taken.

WRONG AID FOR HOSPITALS.

Dr. Joseph Price, of Philadelphia, stirred the members of the State Medical Society by his sharp talk in a speech on "The harm to both public and physicians of the erroneous principles of State aid to local hospitals." He said:

The truth is that State and benevolent aid reaches no limit and it is not restricted to economy. One humiliating defect is the legislative levy of graft upon charity. This subject is of broad and deep interest. It is not restricted to our profession or to any class. It appeals directly to the best instincts of our humanity, to the civic pride and honor of the citizen. It is of specially vital concern to the medical and surgical profession.

The State has not been miserly or ungenerous in the matter of appropriations. The money, the earnings of the people, has been dealt out with a free hand. It may or may not have been wisely equitable.

Needs have been exaggerated by the increased cost of maintenance, where plain, economical furnishings would have answered the purpose just as well. Whether a patient is kept in a \$4 equipped room or a \$4,000 equipped room, it all goes on under the head of charity just the same.

The comfort of a patient is best in a plain, well-lighted room, not luxuriously furnished. But the economical operation of hospitals does not suit the aristocrat who directs the institution. Let us have plain, business men in charge of hospital affairs, and honest men.

The local hospital is not an almshouse. There exist certain unfavorable conditions, lack of business relation among employees, no cordial fellowship and no harmonious action.

DOWN ON CHEAP DOCTORS.

Dr. J. Newton Hunsberger, of Skippack, discussed "What stand should the profession take on the reduction of fees by life insurance companies?" He said that one cheap man in a community of 100 physicians can upset all honest endeavors to keep up the fee, and thinks such a doctor should be expelled from the society. In closing, he said:

"Really, gentlemen, it seems childish to stand before a body of intelligent, cultured physicians and argue that any fee less than \$5 is adequate. It is a reflection on us that is galling when there are 92 per cent. of the profession willing to accept a cut of 40 per cent. on an already low fee, without any reason whatever that is valid or true, but simply to satisfy the cheap, economical ideas of the managers of some life insurance companies.

"If I read aright the spirit of this society, it will go on record as unalterably opposed to any fee less than \$5."

These trenchant phrases were a part of a paper on "Imbecility and Crime and the legal restraint of imbeciles," read by Dr. Charles W. Burr, of Philadelphia.

"Many crimes are committed by imbeciles. The laws of Pennsylvania permit imbeciles to be removed from institutions for the care of imbeciles at any time, notwithstanding their condition. The result of this is that many of these persons enter on a criminal career as soon as they leave the in-

stitution. It would be much better if imbeciles admitted to institutions should be kept there for life, unless a committee of physicians and laymen determine that they are safe to be let at large. The intellectual training of imbeciles without moral sense or with criminal instincts leads only to evil. It increases the ability to commit crimes. They should be taught nothing but manual labor, and should be segregated on farms, where they could earn their living."

Discussion of this paper was led by Drs. C. K. Mills, of Philadelphia, and Theodore Diller, of Pittsburgh.

The address this morning by Dr. John C. O'Day, of Oil City, contained a number of features of special interest. He spoke on "The Misfortunes of Scientific Medicine," comparing the misfortunes of medical science with those misfortunes which from earliest time have hampered "the search for truth" by all investigators. He expressed the earnest hope of seeing the schools of homœopathy, the eclectics and his own becoming united to form a united profession, and while a bit of a surprise, it seemed to be apropos of the spirit prevailing.

JOB LOT LODGE PRACTICE.

In the course of his address on "Lodge Practice, Legitimate and Illegitimate," Dr. George E. Holtzapple, of York, said:

"The purpose of this paper is to make a strong protest against the use of contract physicians, who at a cheap rate attend members of lodges and their families. The usual price for these cases is \$100 a year. Such a low fee, with its cheap medical attendance, is used as an object to draw members. Of questions sent out to various physicians in regard to how many lodges they were in, and how many were treated free, and the amount paid by such lodges, half ignored it. Those who did respond mostly were members of the American Medical Association and practitioners for twenty years or more. What their motive is for engaging in such work cannot be surmised. Therefore there are many in the ranks who are indifferent to the material interests of our profession. No physician with any self-respect will give his services for such low and paltry sums, where they are physicians by choice. Many unscrupulous doctors also ingratiate themselves into the good graces of the children of the neighborhood."

This afternoon was devoted to sectional meetings, at which committee officers were elected for the year.

This evening was devoted to a reception to the visitors by the Berks County Medical Society at the Highland House, on Neversink Mountain.

These general officers were elected: President, William L. Estes, of South Bethlehem; vice-presidents, S. G. Stadler of Bedford, Daniel Longacker of Berks county, Theodore Diller of Allegheny, J. Langton of Schuylkill; secretary, C. L. Stevens of Bradford; assistant secretary, S. B. Appell of Lancaster; treasurer, G. W. Wagner of Cambria.

Cambridge Springs was selected as the next meeting place.

A New Deposit of Radium.—A Swiss newspaper says that Prof. Joly, in examining specimens of the strata collected from the borings for the Simplon tunnel, found rich traces of radium, indicating large deposits of the mineral. He believed its presence accounted for the unusual heat experienced in constructing the tunnel.

Reports from County Societies.

CAMDEN COUNTY.

H. H. Sherck, M. D., Reporter.

The Camden County Medical Society held its meeting in the Dispensary Building, 729 Federal street, Camden city, on October 8. A full attendance was present.

The popularity of these meetings was made apparent by the large number of visitors present from adjoining counties. Gloucester County was represented by Drs. Reading, Stout, Diverty and Edwards; Burlington, by Dr. Boysen; Salem, by Dr. Chavanne.

The scientific program was well received and freely discussed. A feature of this program was that it was composed entirely of home talent. The following sections reported:

Sanitary Science—"The Hygiene of the Oral Cavity," by Dr. Harry H. Sherck, of Camden; discussed by Drs. J. F. Leavitt and William I. Kelchner.

Section on Microscopy and Pathology—"The Pathology of Typhoid Fever in Children," by Dr. Alexander McAlister, of Camden; "The Value of the Leucocytic Count as a Diagnostic Aid," illustrated by blackboard demonstrations and microscopes, by Dr. J. W. Martindale. This paper was discussed by Drs. Markley, Chavanne, Sherck, Lippincott, Ross and Rowntree.

On motion of Dr. H. H. Davis, the papers were recommended to be published in THE JOURNAL of the State Society.

The following members were recommended by the board of censors for election as members of the society: Drs. Albert B. Davis and F. M. Madden. Drs. Thos. B. Lea, Edward Parry, Ernest Hummel and Samuel English were proposed for membership and referred to the board of censors.

Our wide-awake secretary, Dr. Daniel Strock, sprung a genuine surprise on the society, by having the announcement appear in the form of a pamphlet, entitled "The Journal of the Camden County Medical Society." We hope it will be a permanent feature of our society. The first page, with the heading "Notice to Members," gives the date of meeting, the scientific program, reports of committees, etc. The inside pages are filled with reading matter of interest to the profession. A feature that is much appreciated is the local and personal news. The journal presents a neat appearance and typographically is perfect. The versatile secretary was highly complimented on his effort. The expense is born entirely by the advertisements that appear in its pages, which were procured by Dr. Strock.

Another pleasing incident was the presentation of a portrait to the society of the late Dr. Onan B. Gross, an honored member for more than thirty years, by his wife. Dr. H. Genet Taylor, after giving a brief history of the life and medical career of the deceased, presented the portrait to the society with a classical address. Dr. E. L. B. Godfrey, in replying, dwelt upon the beautiful life of the doctor, and closed with a quotation of Bryant's beautiful poem,

"By an unfaltering trust approach thy grave,
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams."

After a business session the society adjourned to partake of the usual collation.

Altogether, the October meeting was a grand success, and those who absented themselves

missed a scientific treat, and "a feast of reason and a flow of soul."

HUDSON COUNTY.

August A. Strasser, M. D., Reporter.

The first regular meeting of the Hudson County Medical Society for the season 1907-1908 took place at Lincoln Hall, Jersey City, on October 1st, Dr. F. D. Gray presiding.

Under the head of reports of clinical cases, Dr. Rector reported and showed pictures of an anencephalos monster, aborted after seven and a half months' gestation, and accompanied by hydramnios. The second case was one of a tubercular abscess of the floor of the mouth, which had been of two weeks' duration, but which experienced rapid enlargement during the last forty-eight hours, and caused intense dyspnea. Dr. Chard detailed the history of a man, who complained of severe pain in epigastrium. The bowels had moved that day and acting on the diagnosis of an enteritis, medication therefore produced an amelioration of the symptoms. Later an exploratory celiotomy revealed a cancer of the descending colon. Dr. Paison prefaced his relation of the history of following case by the remark that it was strange how frequently abnormal conditions existed without causing acute symptoms. A woman who was in apparently perfect health until a few days ago, suddenly developed cramps. Temperature remained normal; but she was sore and had a mass midway between McBurney's point and the ribs. Later at night her temperature went to 103 degrees. Celiotomy showed a cholecystitis, cholelithiasis and a beginning empyema of the gall bladder.

Dr. Sexsmith reported an interesting case of purpura where large doses of calcium chloride, as, in fact, every kind of medication, proved unavailing. Blood oozed from mouth and gums; then later ecchymoses appeared on the skin; then blood appeared in stools and vomitus.

Dr. Rosenkrans detailed the clinical history of his own son's illness. The young man, nineteen years of age, a student at Wesleyan, ate some oysters at a banquet. Typhoid had been endemic at the college for some time; but he did not develop typhoid, but had a constant diarrhea for a while, intractable to all medication; Widal reaction was negative. He complained of great fatigue and urinalysis showed a high percentage of albumin. He was taken to the mountains; there the albuminuria ceased, but the condition changed to typical phosphaturia. Severe exertion recalled the albumin occasionally but this has now totally disappeared.

Dr. Bull related the case of an epithelioma of the lower eyelid cured by the application, in four sessions, of radium. Competent observers had made the diagnosis and advised operation. The cure was complete.

Dr. Spence reported the case of a boy aged twelve years, a Russian by birth, whose history extended over eight months; he was emaciated, abdomen contained fluid and a tumor was felt in the hepatic region. Celiotomy advised but not accepted until six weeks later. When operated on, there was found much ascites, all the viscera were normal except the liver; this was especially enlarged on the right side and its surface was studded with millet-seed spots, which were confined to liver only. He died suddenly. At autopsy, section from the liver showed only a cir-

hosis. The peculiarity of the case was that there had been no jaundice at any time.

Dr. Gray related a case seen in consultation with Dr. Vreeland. The man was a chemist; he was emaciated and jaundiced. Physical examination proved negative, except that there was a slight decrease in the normal liver dullness. The diagnosis was made of obstructive jaundice due to cholelithiasis. Another consultant expressed a suspicion of cancer of the liver. Death occurred and the autopsy showed the following interesting condition: Liver was normal; gall bladder, no stones but distended. The head of the pancreas much enlarged and toughened, so that the man might possibly have been cured by Mayo Robson's operation. Microscopically, a scirrhous carcinoma of head of pancreas was diagnosed.

Dr. Bogardus detailed a case of acute anterior polio-myelitis. Of the symptoms, Kernig's sign was present, indican found in urine; bowels flushed. Autointoxication as an explanation of its etiology; corroborated by the usually coincident nephritis.

Dr. Chambers reported an interesting case of gall bladder trouble in a man ninety years of age. The diagnosis was based on the sudden sharp pain experienced in the right axillary line, and lasting for about ten to fifteen minutes, having had three or four such attacks in the last few months. He had an abscess of the liver, secondary to trauma twenty-five years ago.

The paper of the evening by Dr. S. R. Woodruff, of Bayonne, was entitled "Diphtheritic Infection of the Larynx." In the discussion that followed it, Dr. Bull dwelt especially on prophylaxis. Early removal of tonsils and adenoids and early injection of antitoxin. The treatment resolves itself into roborants and antitoxin. The true differential diagnosis is occasionally very difficult. Dr. Parsons said that he relies much on the voice to tell him if the larynx has been invaded. Dr. Rosenkrans expressed himself as very much averse to tracheotomy, all his cases having proved fatal. Dr. Spence urged that as early diagnosis as possible be especially made. Others joining in the discussions were Drs. Dodson, Larkey, Bowman, Lampson and Gray.

Under election of new members, Drs. Axford, Daly, Mason, McNeurra and Larkey became members of the society.

Dr. Watson called attention to the necessity of paying more attention to the illegal practitioners in the county, and the illegal midwives. The Committee on Legislation could, with propriety, prosecute these people.

A card index system was established so that the Secretary might work with greater facility.

After other routine matters, society adjourned at a very late hour and partook of the lunch prepared.

MIDDLESEX COUNTY.

Benjamin Gutmann, M. D., Secretary.

The regular quarterly meeting of the Middlesex County Medical Society was held at the Packer House, Perth Amboy, Wednesday, October 16th. In the absence of President Carroll, of Dayton, Vice-President F. E. Riva, of New Brunswick, occupied the chair. The meeting was characterized by a much larger attendance than usual. The members enjoyed an excellent dinner served at 2 o'clock P. M. and the business meeting began at 3 o'clock. The special feature of the meeting was a very able and instructive paper on Ap-

pendicitis by Dr. John J. McGrath, of New York City. He dealt with the classification, clinical features and pathology of the various forms of that affection. (A copy of the paper has been promised for THE JOURNAL.) The paper was warmly discussed by Drs. Wilson, Ramsay, Lund, Henry and Fithian, of Perth Amboy, and Drs. English and Gutmann, of New Brunswick. Dr. McGrath was tendered a vote of thanks.

A committee of three, Drs. Albright, Wilson and Gutmann, was appointed to arrange for a paper or subject for discussion, or both, for the January meeting of the society. The Secretary read a communication from Dr. Chandler, Secretary of the State Society, in reference to its action on the question of Medical Defence, when on motion Drs. Ramsay and English were appointed to consider the subject of the medical defence of its members by the State Medical Society, and report at the next quarterly meeting.

The legislative bill for the licensing of osteopaths was discussed by Drs. English and Ramsay. Dr. English made some remarks on the subject of pure, clean milk, referring to the discussion of the subject at the late meeting of the State Sanitary Association at Atlantic City.

A resolution was unanimously adopted expressing the judgment that the summary removal of Dr. J. W. Ward as Medical Director of the State Hospital at Trenton was an uncalled for indignity, and also extending to him an expression of sympathy and confidence.

The society then adjourned to meet at South Amboy on Wednesday, January 15, 1908.

CUMBERLAND COUNTY.

S. M. Wilson, M. D., Reporter.

The semi-annual meeting of the Cumberland County Medical Society was held on October 8, at City Hotel, Bridgeton. The meeting convened at 11 o'clock a. m. and was presided over by the President, Dr. E. S. Corson. The attendance was good.

In the absence of two gentlemen who were to read papers, the only report read was by Dr. A. J. Mander on Alkalometry, in connection with Progress in Therapeutics. This was interesting and instructive and was generally discussed.

In the absence of three other papers, the subject of Typhoid Fever was introduced by Dr. Irving E. Charlesworth. Various opinions and experiences of different members were expressed.

The Society was pleased to have among its participants a former fellow resident, in the person of Prof. J. C. Applegate, of Temple College, Philadelphia.

At the appointed hour, one of the City Hotel's well provided dinners was partaken of, and adjournment was made, with motion to hold the next meeting in January at Millville.

Bridgeton, N. J., Oct., 22, 1907.

THE TRI-COUNTY MEDICAL ASSOCIATION —MORRIS, SUSSEX, WARREN.

By Charles B. Smith, M. D., Secretary.

The ninth annual meeting of the Tri-County Medical Association was held in the Royal Arcanum rooms, Morristown, N. J., October 8, 1907, the president, Dr. Alfred A. Lewis, of Morristown, in the chair. Owing to a severe storm in the early part of the day there was a smaller number of members present than usual. Those who braved the storm were amply repaid in listening

to an able paper by the president, and a highly instructive and pleasing talk by Dr. Reynold W. Wilcox, of New York, on "Twenty-five Years in Medicine, Retrospect and Prospect."

The following officers were elected for the coming year: President, Alvah C. Van Syckle, M. D., Hackettstown; first vice-president, J. B. Pellet, M. D., Hamburg; second vice-president, James Douglas, M. D., Morristown; treasurer, F. W. Flagge, M. D., Rockaway; secretary, C. B. Smith, M. D., Washington; executive board, Bruno Hood, M. D., Newton; Calvin Anderson, M. D., Madison; L. C. Osmun, M. D., Hackettstown. Finance Committee—H. W. Kice, M. D., Wharton; E. Morrison, M. D., Newton; C. M. Williams, M. D., Washington. Committee on Arrangements—Chas. M. Williams, M. D., Washington; Thos. S. Dedrick, M. D., Washington.

The next meeting will be held at Washington, N. J., Tuesday, October 13, 1908.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The thirty-fifth annual meeting was held at Atlantic City, N. J., September 30 to October 4, 1907. The president, Dr. Domingo Orvananos, Mexico City, in the chair.

The general association met in the Marlborough-Blenheim Hotel. One hundred and seven applicants were elected to membership from different sections of the United State, Canada and Mexico.

The laboratory section held its meeting September 30, under the chairmanship of Dr. Hibbert W. Hill, of Minneapolis, Minn. Two new sections were organized at this meeting; one, a section composed of municipal health officers, the other, a section on vital statistics.

The following papers were presented and discussed at the sessions of the Association. (The New Jersey Sanitary Association, which observed its annual meeting in union with the A. P. H. A., had its own programme for the joint session of Tuesday, October 1, which is elsewhere reported.—*Editor*):

The Outlook for a General System of Registration of Vital Statistics, by Dr. C. L. Wilbur, of Washington, D. C.; Sources of Error in the Laboratory Diagnosis of Diphtheria, by Dr. H. W. Hill, of Minneapolis; Control of So-called Minor Infectious Diseases, by Drs. A. G. Young, of Maine, and Alfonso Pruneda, of Mexico City; Typhoid Fever at Knoxville, Tenn., and Its Relation to the Water Supply, by Messrs. R. S. Weston and R. C. Tarbett, of Boston, Mass.; Contact Infection, by Dr. C. V. Chapin, of Providence, R. I.; Uncinariasis in Florida, by Dr. J. J. Kinyoun, of Jacksonville, Fla.; High Altitudes in Tuberculosis, by Prof. Weinzirl, New Mexico; Effect of Heating on the Determination of Leucocytes in Milk, by Prof. H. L. Russell and Mr. Conrad Hoffman, of Madison, Wis.; Determination of Intestinal Bacteria in Milk, by Dr. D. D. Jackson, of Brooklyn; Diphtheria Diagnosis, by Dr. B. R. Richards, of Boston; The Diagnosis of Rabies, by Dr. A. W. Williams, of New York City; Social Ethics as Influenced by Immigration, by Dr. P. H. Bryce, of Ottawa, Canada; Trachoma and Immigration, by Dr. A. Chacon, of Mexico City; Ophthalmia Neonatorum, by Dr. F. P. Lewis, of Buffalo.

These papers with the other proceedings of the Association will be given in the annual volume of Transactions published by the Association,

Brief abstracts may be found in the *Journal of the American Medical Association*, issue of October 19th. The Association is considering the advisability of journalizing its transactions and its committee will report thereon at the next annual meeting.

OFFICERS.

The following officers were elected for the ensuing year: President, Dr. Richard H. Lewis, Raleigh, N. C.; first vice-president, Dr. Gardner T. Swarts, Providence, R. I.; second vice-president, Dr. Charles J. Hodgetts, Toronto, Ontario; third vice-president, Dr. Manuel Iglesias, Mexico City; treasurer, Dr. Frank W. Wright, New Haven, Conn.; secretary, Dr. Charles O. Probst, Columbus, Ohio.

Winnipeg, Manitoba, was selected as the place of meeting in 1908.

The Annual Banquet given at the Marlborough-Blenheim Hotel, Atlantic City, to the members of the American Public Health Association and the New Jersey Sanitary Association and the ladies accompanying them, was on a grand scale and with a large attendance. The menu was most excellent and the postprandial speeches were much enjoyed, judging from the applause. The speakers were in order given: Dr. Domingo Orvananos, Mexico City (Pres. A. P. H. A.); Dr. Frederick Montizambert, Ottawa, Canada; Dr. William Bailey, Louisville, Ky.; Dr. D. C. English, New Brunswick, N. J.; Dr. G. K. Dickinson, Jersey City (Pres. N. J. S. A.); Dr. C. L. Wilbur, Lansing, Mich.; Gen. A. A. Woodhull, M. D., Princeton, N. J.; Dr. R. L. Lewis, Raleigh, N. C.; Dr. H. W. Hill, Minneapolis, Minn. Prof. F. C. Robinson, of Bowdoin College, Brunswick, Maine, was the toastmaster and he proved himself fully equal to the occasion.

DR. H. A. COTTON, MEDICAL DIRECTOR STATE HOSPITAL, TRENTON.

Dr. Harry A. Cotton, of the Hospital for the Insane, at Danvers, Mass., was elected medical director of the New Jersey State Hospital for the Insane, October 18th, to succeed Dr. John W. Ward.

At one time it was thought that Dr. William H. Hicks, senior assistant at the Essex County Hospital for the Insane, would be chosen for the post. Others who were considered by the trustees were Dr. John C. Feltz, acting medical director at the institution, and Dr. C. K. Cassatt, second assistant physician at the State Hospital for the Insane at Morris Plains.

Dr. Cotton is a native of Maryland and although only thirty-five years old has gained for himself a wide reputation as an alienist. He has been connected with the Danvers Hospital, one of the State institutions of Massachusetts, for ten years, his present position being that of first assistant physician. This hospital, both because of its size and the advanced methods employed there, is noted throughout this country. Dr. Cotton was formerly connected with the hospital at Worcester, Mass. He has had quite an extensive experience abroad, having studied and conducted investigations at Berlin and Munich. He is known to the medical profession as a writer on insanity and also on laboratory researches, which have been quite extensive.

Dr. Cotton has spent a good deal of time in New Jersey and has relatives living at Princeton.—From the *Newark Evening News*.

THE JOURNAL

OF THE

Medical Society of New Jersey

NOVEMBER, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

MEDICAL MEN AS LEGISLATORS

We see by the reports in the daily press that a few physicians have been nominated for the Assembly, and we are sorry that two others declined to accept the nomination. There should be at least five or six doctors of recognized ability and integrity in that body to guide especially in all medical legislation, not for the "protection of our interests," but the interests of the people. We say especially in laws affecting the public health and the lives of our citizens, but, as intelligent men, not likely to be swerved by undue partisanship and graft, such men can be trusted in all matters of legislation to act for the public good.

THE NEW JERSEY SANITARY ASSOCIATION

The attendance at the thirty-third annual meeting of the New Jersey Sanitary Association, held in the Marlborough-Blenheim Hotel, Atlantic City, October 1 and 2, was not as large as usual owing doubtless to the fact that the place was not as centrally located as usual, but more to the fact that its sessions were brief and that being held in connection with the annual meeting of The American Public Health Association its proceedings would be overshadowed by the larger attendance and numerous papers of the latter body. There was but one subject discussed by the Sanitary Association—The Ideal Milk of the Future, a symposium

on that subject occupying most of the afternoon session of October 1st. Able papers were presented by Prof. R. A. Pearson, of Ithaca, N. Y., Prof. E. B. Voorhees, of New Brunswick, Dr. Thomas Darlington, Health Officer of New York City, and Dr. C. B. Lane, of Washington, D. C. The papers were discussed by several members of both associations. The papers and discussion showed decided advance in the solution of the problems of a pure milk supply during the past few years and excellent suggestions were made which, if adopted, will tend to hasten the day when we shall have a pure, clean milk supply. It was made evident that when we shall have ideal dairying and transportation, with ideal methods of local distribution, under approved medical and municipal control, that the public will have to pay from twelve to fifteen cents per quart for such milk. The annual address by the President, Dr. Gordon K. Dickinson, of Jersey City, on "Evolution of Association—The State Sanitary in Particular," was an able one and we shall publish it in our next issue of THE JOURNAL. Another item on the annual meeting will be found in another column.

"REPORTS ON THE TRENTON TYPHOID."

In another column of this issue will be found an editorial from the *New York Daily Tribune* of October 12th on "Reports on the Trenton Typhoid." It quotes from the two reports—of the State Sewerage Commission and of Dr. Mitchell to the State Board of Health, and closes as follows: "Certainly we have read to little purpose the results of the best scientific investigation and study of recent years if it is prudent to disregard a water supply which is contaminated with typhoid-laden sewage as a possible source of infection, when an epidemic of typhoid appears," etc. With that statement there will be no difference of opinion among scientific men. Not only is it not prudent to disregard such water supply, but the authorities are grossly culpable in so doing. We believe there has been no

department of the State Board of Health's work more zealously and efficiently performed than that of protecting the public water supplies of our State, to prevent them from becoming sources of infection, and of promptly correcting pollution from sewage or other sources of contamination when such pollution was discovered.

But that is not the question involved in the report of Dr. Mitchell. The question—Did the infected water supply at the Hospital cause *that* epidemic? The *Tribune*, in quoting from Dr. Mitchell's report, omits the most important item bearing on this question—item (4) as follows:

"From the west wing the infection was carried to other portions of the main building, but, as above stated, not a single case occurred in the Annex, indicating that the infection was not conveyed by the milk or water, for the supply of both of these articles was from the same source for both buildings. The water supply for all of the buildings on the hospital premises was taken from the same piping system, and in the standpipe, located near the Annex, the water which was pumped into the mains from the spring and from the wells was undoubtedly often thoroughly mixed before distribution to the various branches and service lines."

In the case of the Washington, D. C., epidemic of 1906, we expressed our belief (September JOURNAL, page 175) that the water supply was at least one of the principal factors in the origin and spread of that epidemic for the reasons we give. In this case—Trenton—the weight of evidence seems to be against that source of origin and spread. The progress of sanitary science has been retarded, possibly more by jumping at conclusions founded on inaccurate bases and the consequent faulty deductions therefrom than by any other causes. To be strictly scientific we must be accurate in our investigations and the reports thereof. That there has been at the Trenton State Hospital grossly unsanitary conditions and carelessness resulting in water contamination, and that there has been inexcusable delay in correcting them, appears to be undoubtedly true, but that that was the cause of this epidemic has not been proven by the report of the State Sewerage Commission.

WHO SHALL DECIDE WHEN SCIENTIFIC MEN DISAGREE?

We would call attention to one fact that should not be forgotten by medical men, by civil engineers and by the public in passing judgment as to the causation and control of preventable diseases, and the responsibility for epidemics—that there are some problems in sanitary administration that tax the best combined powers of the civil engineer and the scientific medical sanitarian. Neither alone should presume to solve them and each should recognize his limitations. Especially should we remember in all matters concerning sewage and public water supplies, there is the question of proper construction and maintenance where the scientific civil engineer is the authority and the scientific medical man's judgment is to have second place, even though, as a trained sanitarian he has a general knowledge of the construction requirements. While in all matters concerning disease resulting from faulty discharge of sewage, or from contaminated water supply, the scientific medical man, with the aid of the specialist in bacteriology, is the authority most competent to decide. Then the two should work together, recognizing the limitations of each other for the correction of evils causing sickness and death.

THE SCIENTIFIC INVESTIGATOR MUST BE ACCURATE.

The importance of accuracy in our investigations and in reporting their results cannot be too strongly emphasized by medical men in these days of progress in all branches of our profession if we desire to increase rather than lessen the rapidity of progress. We believe that the patient and thorough investigation by the able sanitarians at Washington, D. C., concerning the cause and spread of the typhoid fever epidemic there is not only far more scientific and will therefore do far more toward preventing epidemics there and elsewhere than to have hastily decided—as facts *seemed* to point—that the polluted water supply was the cause. On the other hand we cite a case

of what we believe to be a too prevalent faulty method of statement. We had the pleasure of listening to an able paper on clean milk by one of our most prominent and able sanitarians, who has done, and is doing, a grand work in one of our largest cities. He stated that through the excellent work done in bettering the quality of and protecting the milk supply of that city, the infant mortality had been reduced from 28 to 16 per cent. The lowered mortality is doubtless due in part—probably in large part—to the improved quality and protection of the milk supply, but it is only one of the factors to be credited. We must not forget the improved general hygienic conditions of the homes of the poor and their surroundings in that city; the instruction given to the parents concerning the care of their infants; the better understanding and treatment by medical men of infantile diseases, and we will not forget to give due credit to the Salvation Army slum and settlement work—especially in caring for the infants and young children while the mothers are obliged to be away from their homes at work.

We congratulate Dr. Strock, the Secretary of the Camden County Society, on his commendable innovation in issuing "The Journal of the Camden County Medical Society, issued from the office of the Secretary four times a year." It is a new method of announcing the regular meetings of the Society, but it is also made the medium for communicating much interesting matter of local interest calculated to stimulate the membership to greater activity and more regular attendance at the meetings. The first issue of sixteen pages contains the notice of the meeting and the program on the first page, the paper on Tetanus read by the secretary at the annual meeting of the State Society, several editorial briefs, a column of "personal mention," the list of officers, committees, delegates and sections, and several advertisements. We understand the latter covered the cost of publication. The Tri-County Medical Society—Morris, Sussex,

Warren—issued a folder giving notice of meeting, program of the meeting and brief "notes." We commend these methods of notification of society meetings.

We are pleased to hear from Dr. C. B. Smith, of Washington, Warren County, that a local Society has been formed in his "borough" called the Washington Medical Association, that one meeting is held each month at which one of its members is required to read a paper, and that the meetings so far have proved very instructive. We believe such local societies are productive of great good to the profession.

We regret that in inserting an article under the caption of "American Physicians and the Distortion of Truth" in the September issue of our JOURNAL, we made the mistake of crediting it to the "Kansas Med. Soc. Journal." It was an editorial from the *Interstate Medical Journal*, St. Louis, and should have been so credited. It was a good editorial and we always desire to "give credit to whom credit is due."

We are pleased to add to our list of old-line insurance companies that are now paying a \$5 flat rate for medical examination the Equitable and the Mutual Life Insurance Co., of New York—they have restored their former rate. We are awaiting others; which will be next? The present list comprises the following:

Ætna Life, Hartford, Conn.
 American National, Galveston, Tex.
 Citizens Life, Louisville, Ky.
 Capital Life, Denver, Col.
 Colorado National, Denver, Col.
 Equitable, New York City.
 Fort Worth Life, Fort Worth, Texas.
 Manhattan Life, New York City.
 Massachusetts Mutual Life, Springfield, Mass.
 Mutual Benefit Life, Newark, N. J.
 Mutual Life, New York City.
 National Life, Montpelier, Vt.
 Northwestern Mutual, Milwaukee, Wis.
 Pacific Mutual Life, San Francisco, Cal.
 Provident Life and Trust, Philadelphia.
 Reliance Life, Pittsburg, Pa.

PRIZE ESSAYS.

Prizes were instituted by the Medical Society of New Jersey at the annual meeting in 1905, and are open for competition to the members of the component (county) medical societies.

The subject is: "Feeding During the First and Second Years of Infancy."

The essays must be signed with an assumed name and have a motto, both of which shall be endorsed on a sealed envelope containing the author's name, residence and component society.

The essays shall not contain more than 4,000 words, and must be characterized by originality in investigation and thought, and by clearness and conciseness of expression and be, in the judgment of the committee, of decided value to the members of this Society and to the profession generally. Failing in these respects no award will be made.

The essays, which should be typewritten with the sealed envelope must be placed in the hands of the committee on or before the 15th day of May, 1908.

The committee will select the first two essays in order of merit. To the first will be awarded the prize of one hundred dollars, to the second a gold medal of the value of fifty dollars.

The unsuccessful authors will receive back their essays upon their identification to the chairman of the committee. The successful essays will be the property of the Society and be published in the JOURNAL of the Society.

CHARLES J. KIPP, Newark, *Chairman*,
DAVID C. ENGLISH, New Brunswick,
WILLIAM ELMER, Trenton.

CONFERENCE ON HEALTH.

Members of State Board and Local Organizations Met at Trenton.

Members of the State Board of Health and delegates from the various local health boards met in their second annual conference at the State house, October 25 and 26, when questions relating to the prevention of the spread of dangerous diseases and matters pertaining to the general promotion of public health were considered. Three sessions were conducted, the first, Friday, October 25 at 10 A. M., the second at 2 P. M., and the third Friday night. The order of business was as follows:

First Session—Opening remarks by the president of the State Board of Health; address, Governor Edward C. Stokes; calling the roll of delegates; announcements; "Justifiable Measures for the Prevention of the Spread of Infectious Diseases," by Dr. Charles V. Chapin, city superintendent of health, Providence, R. I.; discussion; Question Box.

Second Session—"Some Avenues of Infection," by Dr. A. C. Abbott, chief of bureau of health, Philadelphia, Pa.; discussion; Procedures to Prevent the Sale of Unwholesome and Adulterated Milk: (a) "Creamery Supervision," by George W. McGuire, chief State inspector of food; (b) "Dairy Inspection," by D. C. Bowen, assistant State inspector of food; (c) "Milk Inspection," by L. R. Thurlow, health officer, Plainfield; (d) "Laboratory Examinations," by R. B. Fitz-Randolph, director State laboratory of hygiene; (e) "Legal Action," by Josiah Stryker, of Trenton; Question Box.

Third Session—"Improvement of the Local Sanitary Service," by Judge William M. Lanning; "Immunity," by Dr. W. H. Park, director research laboratories, department of health, New York City; lantern slides.

THE NEW JERSEY SANITARY ASSOCIATION.

The thirty-third Annual Meeting was held in the Marlborough-Blenheim Hotel, Atlantic City, October 1st and 2d, in union with the annual meeting of the American Public Health Association. The Sanitary Association having the afternoon session of the combined bodies, and holding a business session of its own body on the morning of October 2d, President G. K. Dickinson presiding at both sessions. He presented an able address at the meeting October 1st, on the "Evolution of Associations—The State Sanitary in Particular," which will appear in the December issue of the JOURNAL. A symposium on "The Ideal Milk of the Future" occupied most of the time of the Tuesday afternoon meeting. It was presented under the heads: "Ideal Dairying and Transportation," "Ideal Methods of Local Distribution," and "Ideal Control, Medical and Municipal." Excellent papers were presented and discussed. The following brief outline is from the Journal of the A. M. A. of October 19th:

PROF. E. B. VOORHEES, New Brunswick, N. J., said the public should realize that even at 12 cents good milk is the cheapest and best nourishment it is possible to buy. To produce pure milk at the present selling price in the big cities at a profit to the farmer is impossible. The most careless dairymen can not turn out even his inferior grade of milk for less than 4.7 cents a quart, while an average cost of the production of 5 cents is the lowest practical rate. A very small additional expense in the price of milk is necessary to guarantee absolute purity and general quality of milk.

PROF. C. B. LANE said that the majority of dairymen would prefer to sell only the best milk procurable, if the public would pay for it, and he declared that the general public is quite willing to stand the higher rate. More stringent legislation is needed to procure permanent results. At the present time the man who adds water to the milk is fined. Generally, the man who sells impure milk goes scot-free, and this despite the fact that the latter is much the greater menace. He advises national laws modeled after the British statutes, which permit a consumer to sue for damages a dealer who supplies him with impure milk.

DR. THOMAS DARLINGTON, New York, advocated that each community shall look after its own milk supply. He recommended systematic and constant inspection, in the first place, and, in the second, the prevention of the sale of any milk which is unwholesome and unadulterated. Every dairy

and every creamery supplying New York City has already been inspected. In regard to preventing the sale of unwholesome milk, he mentioned that the Court of Special Sessions recently had 260 cases before it. Gastrointestinal diseases have been markedly reduced since the proper inspection of milk has been enforced.

PROF. R. A. PEARSON, Cornell University, discussed the production of milk under five headings, namely: Health of the cow; cleanliness of the cow and her surroundings; condition of the utensils in which the milk is handled; cleanliness of the employees, including their health, and the cooling and storing of the milk. Speaking of the tuberculin test, he said that when farmers clearly understand its true value, they will want this test made. When they are shown by demonstration that which they fail to understand, they are anxious to have this test. Very many milk producers are honest and anxious to do what is right. They need instruction. A campaign of education has been begun. It needs support. Every milk producer should have the opportunity to know the latest concerning his business, then many of them will make the desired improvements in their dairies, and the realization of ideal dairying will go hand in hand with the necessity of enforcing laws.

The general discussion of the papers was opened by Health Officer Topman, of Syracuse, N. Y., and continued by M. N. Baker, C. E., Montclair; Prof. J. B. Smith, New Brunswick; Dr. Hollister. Reports were presented by the various committees.

At the second session, October 2d, several new members of the Association were elected. Action was taken in reference to a course of instruction in one of our colleges of health officers, sanitary inspectors, etc. The matter was referred with power to the Committee on Education and Training of Health Officers, with the Legislative Committee cooperating.

The following officers and committees were elected: President, John B. Duncklee, C. E., South Orange; first vice-president, W. H. Schaufler, M. D., Lakewood; second vice-president, Rudolph Hering, C. E., Montclair; third vice-president, Edward Guion, M. D., Atlantic City; secretary, James A. Exton, M. D., Arlington; treasurer, George P. Olcott, C. E., East Orange, chairman Executive Council, Prof. J. B. Smith, Sc. D., New Brunswick.

Executive Council: D. E. English, M. D., Millburn; W. H. Shipp, D. D., Bordentown; William J. Harrison, Lakewood; T. Frank Appleby, Asbury Park; Thomas W. Harvey, M. D., Orange; H. C. H. Herold, M. D., Newark; Henry B. Francis, Camden; John W. Griffin, Arlington; A. Clark Hunt, M. D., Metuchen; R. H. Parsons, M. D., Mount Holly; M. R. Sherrerd, C. E., Newark; B. V. D. Hedges, M. D., Plainfield; A. W. Bailey, M. D., Atlantic City; T. N. Gray, M. D., East Orange; G. E. McLaughlin, M. D., Jersey City; Henry H. Davis, M. D., Camden; Stewart Hartshorn, Short Hills; Joseph Tomlinson, M. D., Bridgeton; Charles J. Fiske, Plainfield; Alex. Marcy, Jr., M. D., Riverton; J. S. Westcott, Atlantic City; E. W. Harrison, C. E., Jersey City; Clyde Potts, C. E., Morristown.

Honorary Members of Council: The ex-Presidents—Prof. C. F. Brackett, M. D., LL. D.; James M. Green, Ph. D.; William K. Newton, M. D.; Henry Mitchell, M. D.; Dowling Benjamin, M. D.; George P. Olcott, C. E.; C. Phillips Bassett, C. E.; Addison B. Poland, Ph. D.; David C.

English, M. D.; Shippen Wallace, Ph. D.; James Owen, C. E.; Vernon L. Davey, Ph. D.; Daniel Strock, M. D.; Herbert B. Baldwin, Ph. D.; H. Brewster Willis; John L. Leal, M. D.; M. N. Baker, C. E.; Norton L. Wilson, M. D.; H. M. Herbert, C. E.; G. K. Dickinson, M. D.

Committees: Publication Committee—David C. English, M. D., Chairman, New Brunswick; Henry Mitchell, M. D., Asbury Park; James A. Exton, M. D., Arlington. Committee on Membership and Registration—Edward Guion, M. D., Chairman, Atlantic City; G. E. McLaughlin, M. D., Jersey City; B. V. B. Hedges, M. D., Plainfield. Committee on the Organization of Anti-Tuberculosis Societies in New Jersey—Thomas W. Harvey, M. D., Chairman, Orange; Irwin H. Hance, M. D., Lakewood; D. C. English, M. D., New Brunswick. Committee on the Education and Training of Health Officers—John L. Leal, M. D., Chairman, Paterson; B. V. B. Hedges, M. D., Plainfield; G. K. Dickinson, M. D., Jersey City; H. C. H. Herold, M. D., Newark; A. A. Woodhull, M. D., Princeton. Committee on Medical Inspection of School Children and Sanitary Inspection of and Sanitary Instruction in Schools—W. G. Schaufler, M. D., Lakewood; Richard C. Newton, M. D., Montclair; J. Brognard Betts. Legislative Committee—George P. Olcott, C. E., Chairman, East Orange; Henry Mitchell, M. D., Asbury Park; H. Brewster Willis, New Brunswick; Joseph Tomlinson, M. D., Bridgeton.

The Association resolved that the next meeting be held in Lakewood at such time and place as the Executive Council shall decide at their meeting in June, 1908.

Correspondence.

COMMITTEE ON LEGISLATION.

DEAR MR. EDITOR:

In the September issue of THE JOURNAL the Committee on Legislation brought to the notice of the County Societies the fact of the near approach of the primary elections—that it was the desire of the committee to know before the election what position the candidates would take on matters vital to our interests. At the present time we have only had one communication as to the standing of prospective candidates. A prominent member of another county society, whom I accidentally met on the train, informed me that his county was all right.

Is not such a condition discouraging? I am tempted to entirely abandon all legislative work with such half-hearted support from the profession. The chairman of the committee had a very pleasant interview with Hon. J. Franklin Fort and is very glad to state to the profession that Mr. Fort expressed himself very positively on matters of interest to us. He believes that the present Medical Law should be upheld; and further says that he does not think too many safeguards can be placed around the practice of medicine. That the standard should be high and all who desire to practice the healing art in the State should fulfil the same requirements. That if elected Governor he wanted the medical men to feel free to come and talk over with him at any time questions of a medical or sanitary nature which would be of benefit to the State and to them he would look for guidance. Is not this a broad and noble stand to take?

The Committee on Legislation would very much like to have the report of the Special Committee

to which was referred the address of President Marcy. He made several recommendations, one of which was that a special hospital should be built for inebriates. We cannot do anything until some action is taken by that committee.

L. M. HALSEY, Chairman.

Williamstown, N. J., Oct. 21, 1907.

MEDICAL COLLEGE STANDING.

Long Branch, N. J., Oct. 18, 1907.

Journal of the Medical Society of New Jersey.

Dear Sirs:—At the last examination of the State Board of Medical Examiners an application was received from the Medical Department of the Temple College of Philadelphia—a night school—and the application was returned to the applicant with the statement that the Temple College was not a school in good standing with the Board of Medical Examiners.

At the same examination another applicant was refused admission to the examinations because of the fact that his college course, instead of being seven months was only six and a half months in each year.

I thought this might be of some interest to you and also be the means of notifying, to some extent, the doctors of the State that this college was not up to the standard established by New Jersey.

Respectfully,

JNO. W. BENNETT,
Secretary.

Current Medical Literature.

The Contagion of Ozoena.—Lemoyex assert that there are a great many lines of parallelism between gonorrhœa and ozonœa, a few of which are that as the gonococcus produces a purulent inflammation in the mucous membrane of the urethra, so that "ozœnococcus" in the nasal mucous membrane produces a purulent rhinitis, and that therefore ozœna is contagious, that just as gonorrhœa may become a chronic gleet, so the ozœnic rhinitis frequently passes into chronic atrophic rhinitis, and that as gonorrhœa produces more or less slowly a sclerosis of the urethral mucous membrane, so does ozœna more or less slowly produce sclerosis and atrophy of the nasal mucous membrane. He concludes that stringent prophylactic precautions should be adopted to prevent the spread of ozœna, particularly among children.—*N. Y. Med. Jour.*, Dec. 22, '06.

Prevention of Disagreeable Results from Diphtheria Antitoxin.—C. G. Roehr (*Chicago Medical Recorder*, January 15, 1905) says these results are susceptibility to another attack and edema, urticaria and arthritis. By the use of antitoxin we prevent the system forming its own antitoxin, and hence do not gain a permanent immunity. This can be avoided by using the antitoxin in small but repeated doses, enough to check but not abort the disease. This is possible only when the patient is under constant supervision, and even then is dangerous in infants or when the trouble is laryngeal. Urticaria, edema, or arthritis may be surely prevented by giving the patient large doses of potassium acetate, well diluted, and securing free action of the bowels, with low diet. According to the amount of antitoxin used, from 0.3 gm. to 2 gm. (5 gr. to 30 gr.) of potassium acetate in a glass of water is given every hour for two to six days or longer. By

this method all disagreeable symptoms may be avoided. This was the case in a boy of seven, to whom was given 68,000 units of diphtheria antitoxin in five and a half days. The action is explained by the remedy favoring elimination which has been overtaxed by the foreign serum.—*American Medicine*.

Pneumonia: Its Successful Treatment.—J. R. Landers, in *The Medical Summary*, declares that the first thing to do in treating pneumonia is to stimulate the glands and absorbents. At the same time the alimentary tract should be cleaned and kept so, in order that it may readily take up the required medicines. The vasomotor system should be balanced, the circulation equalized and balanced, the body tension brought up, and the emunctories opened and kept in this condition. The writer then describes his method. First, one-tenth grain of calomel is given every hour till one grain has been administered. A saline laxative, sufficient to thoroughly wash out the alimentary tract, follows. In order to keep this system clean an efficient intestinal antiseptic is given, such as the sulphocarbolates. Digitalin is given to strengthen the weakened capillaries and to restore their contractile power in order to force the excess of blood out into the general circulation. It is possible that this remedy alone may prevent later stages. Aconitin is given to relax, that is, to overcome vasomotor spasm outside of the diseased lung. Together with digitalin, this restores the tone and contractile power of the capillaries, balancing up the circulation. As a local application, the writer rarely uses anything except the cotton "batten" jacket to cover the entire thorax. He declares that this method will lessen the mortality of pneumonia 80 or 90 per cent.—*N. Y. Medical Record* (July 27, 1907.)

Transmissibility and Curability of Cancer.—Dr. William Seaman Bainbridge, of New York City, in the *Boston Medical and Surgical Journal* (June 27), calls attention to the growing fear of cancer on the part of people of all classes. He attributes this to the theories of heredity, congenital transmission, and contagiousness or infectiousness as causal factors in the production of the disease. The fear of the contagiousness of cancer has been aroused by the exploitation of the subject in the public press. After reviewing the evidence *pro* and *con* of the theories, he calls attention to the following points, adduced from the mass of conflicting evidence, which, pending the solution of the "cancer problem," will lead no one into danger: (1) That the hereditary and congenital acquirement of cancer are subjects which require much more study before any definite conclusions can be formulated concerning them. (2) That in the light of our present knowledge they hold no special element of alarm. (3) That the contagiousness or infectiousness of cancer is far from proved. (4) That evidence to support the theory of contagion or infection is so incomplete and inconclusive that the public need not concern itself with it. (5) That the public need merely be instructed to apply the same precautionary measures as should be brought to bear in the care of any ulcer or open wound. (6) That the danger of the accidental acquirement of cancer is far less than from typhoid fever, syphilis or tuberculosis. (7) That in the care of cancer cases there is much more danger to the attendant of septic infection, of blood poisoning from pus or

ganisms, than from any possible acquirement of cancer. (8) That the communication of cancer from man to man is so rare, if it really occurs at all, that it can practically be disregarded. (9) That in cancer, as in all other disease, attention to diet, exercise, and proper hygienic surroundings, is of the utmost importance. (10) That cancer is local in its beginning. (11) That, when accessible, it may, in its incipency, be removed by radical operation so perfectly that the chances are overwhelmingly in favor of its non-recurrence. (12) That once it has advanced beyond the stage of cure, in many cases suffering may be palliated and life prolonged by surgical means. (13) That while other methods of treatment may, in some cases, offer hope for the cancer victim, the evidence is conclusive that surgery, for operable cases, affords the surest means of cure.

Neurosis Simulating Gall-Stone Colic.—

Ewald (*Therap. d. Gegenw.*, 1906, No. 3).—Ewald reports the following instructive case: A woman, 30 years old, had suffered for a long time with extremely severe attacks of pain in the hepatic region, which resisted all treatment, so that she had become a victim of morphinism. There was circumscribed tenderness in the region of the gall-bladder. At the operation, however, all the abdominal viscera were found normal. The pain continued for nine days after the operation, and then gradually disappeared, apparently permanently. The pain and tenderness evidently were of purely nervous origin, and the possibility of such an occurrence should not be ignored in making the diagnosis of gall-stones.

Pancreatitis Due to Direct Extension of a Malignant Growth of the Gall-bladder Along the Common Bile and Pancreatic Ducts.—A. W. Mayo Robson and P. J. Cammidge, in *The Lancet* (Aug. 24), report a case which is clinically interesting as showing how closely cancer of the gall-bladder may simulate cholelithiasis, if the disease be associated with suppuration. The intermittency and severity of the attacks of pain for thirteen months, without jaundice, suggested the presence of gall-stones in the cystic duct, and the last severe seizure, followed by jaundice, made it appear probable that a calculus had passed into the common duct. Although no gall-stones were actually found, either at the operation or later, it is quite possible that cholelithiasis may have been the original cause of the disease, and this is rendered possible by the presence of more advanced inflammatory changes in the head of the pancreas than could be accounted for by the recent invasion of the gland by malignant disease from the ducts of Wirsung. Their experience in other cases of cancer of the pancreas has shown that an inflammatory condition is apt to supervene as a complication in a certain proportion of cases, and unless this is borne in mind it may lead to errors in diagnosis and to useless operation.

Surgery of the Biliary Passages.—Lejars considers choledochenterostomy a makeshift among the various methods for exploration and drainage of the chief biliary passages. In one of his own cases, in which he had intended to perform cholecystenterostomy, he found the gall bladder so small and retracted that he was not able to make the desirable anastomosis with the intestine. He consequently did a choledochenterostomy. Al-

though the patient seemed to improve, he died three days later. Lejars believes that this operation should be employed only as a last resort when nothing else can be done. In a case of old obstruction of the ductus communis choledochus, Lejars had recourse to duodenotomy. The result was excellent, the circulation of the ductus communis choledochus being reestablished. Since his last report of three cases, this operator has added to the list three more cases treated according to Kehr's method. In these six cases recovery took place.—*Gazette des Hôpitaux Civils et Militaires*.

Calcium Iodide in Ulcers.—The good effect produced by calcium chloride in the treatment of acute ulcers led Stephens to try calcium iodide, and he says that the effect in reducing thick callous edges of chronic ulcers into thin healing ones was little less than miraculous. One or two of his patients found great difficulty in taking potassium iodide, but the calcium iodide agreed excellently, and the result was invariably good as regards smell, discharge and pain.—*British Medical Jour.*

State Laboratory of Hygiene.—During the month of January, 1907, 270 specimens of food and drugs were examined under the direction of the State Board of Health, 30.4 per cent. of which were adulterated.

Bacteriological Examinations for Diagnosis.

During the month of January 780 specimens were examined for diagnosis as follows: From suspected cases of diphtheria, 316; tuberculosis, 319; typhoid fever, 125; malaria, 11; miscellaneous, 9.

Personal.

Dr. J. Edward Blair, of Burlington, N. J., surgeon of the Third Regiment, National Guard, has been critically ill with typhoid fever. He was removed from his home in Burlington to the Medico-Chirurgical Hospital, Philadelphia.

Dr. P. Conover Field, Assistant Surgeon U. S. Army, who has been on duty in the Philippines during the past two years, and is now at Fort Wayne, is enjoying a month's furlough in New Jersey. He was born in New Brunswick, N. J., and was for a short time associated with the late Dr. H. R. Baldwin, in practice in that city.

Drs. Carl Buttner, of Orange; H. L. Coit, of Newark; J. S. Baer, of Camden, and A. C. Hunt, of Metuchen, have returned from extensive European trips, and Dr. B. B. Ranson, Jr., of South Orange, from Nova Scotia.

Dr. Margaret Mace, of Wildwood, Cape May county, became a member of the American Medical Association in September.

From the daily press we learn that the following New Jersey doctors have been nominated for political office: For the Assembly—Drs. Samuel Ashcraft, of Gloucester; J. C. Brown, of Burlington; James H. Lowrey, of Essex; William E. Ramsay, of Middlesex. For County Clerk—Dr. Geo. R. Robbins, of Mercer. For Mayor—Drs. Frank M. Cook, Hackettstown; C. R. P. Fisher, Bound Brook; Archibald C. Forman, Bayonne; Chas. Freeman, Metuchen; Nath. S. Hires, Salem; Chas. B. Holmes, Rahway; H. S. Kinmonth, Asbury Park; Walter Madden, Trenton; Andrew F. McBride, Paterson; J. Boyd Risk, Summit; Ezra B. Sharp, Camden; Chas. B. Smith, Washington; John H. Van Mater, Atlantic Highlands; William J. Wolfe, Chatham.

Marriages.

HAYWARD—DOTY.—In New York City, October 11, Dr. Theodore Hayward, of Hackettstown, to Miss Elizabeth Doty, of Paterson. They will reside in Washington, N. J.

RIGGANS—SAXTON.—At East Orange, N. J., October 17, Dr. Edward N. Riggans to Miss Madeline F. Saxton.

RUSSELL—DUNHAM.—At Pittsfield, Mass., September 30, Dr. Charles Bradley Russell, of Paterson, N. J., to Miss Harriet Dunham, of Pittsfield.

TEMPLE—VAN BRUNT.—At Delawanna, N. J., October 8, Dr. Arthur H. Temple, of Passaic, N. J., to Miss Ruth Van Brunt, of Delawanna.

Obituaries.

CLOSSON.—At Lambertville, N. J., September 26, Dr. Albert L. Closson; graduated at the Philadelphia College of Medicine and Surgery, 1863; one of the oldest practitioners of Hunterdon County.

FAYERMAN.—In Petersburg, Va., Dr. Walter B. Fayerman, a graduate of the Leonard School of Medicine, Shaw University, Raleigh, N. C., 1896; a member of the American Medical Association; formerly a practitioner of Atlantic City, N. J.

MCCAULEY.—At Glenmore, N. J., September 29, from peritonitis, after ten days' illness, Dr. James D. McCauley; graduated at the University of Pennsylvania, Department of Medicine, Philadelphia, 1859. Aged 77 years.

STIGER.—At Schooley's Mountain, N. J., October 1, from cerebral hemorrhage, Dr. J. Henry Stiger, of Mendham, N. J.; graduated at the New York University, New York City, 1857; was a surgeon during the Civil War.

WILLIS.—At Jersey City, October 7, at the age of forty-three years, Dr. Lillian Alice Willis. She was born at Trumansburg, N. Y. She had practiced in Jersey City for more than twenty years.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics—September, 1907.

There were 3,405 deaths reported in New Jersey during the month ending September 15, 1907. Infantile diarrhoea caused the greatest number of fatalities (698). Among other important causes of deaths were the following: Diseases of the nervous system, 346; pulmonary tuberculosis, 283; diseases of the heart and circulatory system, 266; pneumonia, 116; cancer, 111.

Typhoid fever caused 55 deaths, 16 of which resulted from the outbreak of this disease in the State Hospital, Trenton. Cerebro spinal meningitis caused 43 deaths, this being 17 more than the monthly average during the past year. Diphtheria and scarlet fever caused fewer deaths than the monthly average. Deaths from suicide numbered 32, or 4 more than the average for the preceding twelve months.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending September 15, 1907, and also the number of deaths reported from certain selected diseases compared with the average for the previous twelve months, those in brackets being the twelve previous months' average in the specified diseases:

Typhoid fever, 55 (36); measles, 18 (11); scarlet fever, 14 (17); whooping cough, 37 (26); diphtheria, 43 (36); malarial fever, 4 (3); tuberculosis of lungs, 283 (306); tuberculosis of other organs, 45 (49); cancer, 111 (118); cerebro-spinal meningitis, 43 (26); diseases of nervous system, 346 (382); diseases of circulatory system, 266 (303); diseases of respiratory system (pneumonia and tuberculosis excepted), 103 (175); pneumonia, 116 (258); infantile diarrhoea, 698 (181); diseases of the digestive system (infantile diarrhoea excepted), 285 (187); Bright's disease, 199 (192); suicide, 32 (28); all other causes, 707 (567); total, 3,405 (2,920).

The number of specimens examined in the bacteriological department of the State Laboratory of Hygiene during September was as follows: Diphtheria, 150; tuberculosis, 218; typhoid fever, 215; malaria, 18; miscellaneous, 7; total, 608.

The number of specimens examined for diphtheria during the summer months when schools are closed is at its minimum. A rapid increase is to be expected soon after the public schools open. The number of specimens examined for tuberculosis is normal for this season of the year. The number examined for typhoid fever is considerably in excess of that for the same period last year, and the percentage of positive results is unusually high, tending to indicate that typhoid is more than usually prevalent this year.

In the department of foods and drugs the number of samples examined was as follows: Food and drugs, 480; water, 78. During the summer and early autumn the number of samples of milk examined was greater than at other times during the year, because of the necessity of more thorough inspection of the milk supply during that time.

Circulars issued by the State Board of Health and now in print are as follows:

- No. 89 Bulletins Nos. 3 and 4.
- No. 94 Contagious Diseases of Animals.
- No. 97 Illuminating Oils.
- No. 98 Restriction of Communicable Diseases
- No. 100 Transportation of the Dead.
- No. 101 Births, Marriages and Deaths.
- No. 103 Food and Drugs.
- No. 104 Prevention of Smallpox.
- No. 105 State Laboratory of Hygiene.
- No. 110 Sanitary Inspection Service.
- No. 112 Restriction of Spread of Malaria.
- No. 113 Collection of Samples of Water.
- No. 114 Prevention of Anthrax.
- No. 115 Prevention of Tuberculosis.
- No. 116 Clean Milk.
- No. 117 Revision of Food and Drug Acts.

These circulars will be sent upon request made to the State Board of Health, Trenton, N. J.

It is remarkable how frequently a purulent pericarditis may exist without causing many or severe symptoms. Never neglect an examination of the cardiac area, therefore, in cases of suspected sepsis.—*Amer. Jour. of Surgery.*

It is a good rule to always inspect the labia before making a vaginal examination. Many pathological conditions in these parts may otherwise pass unsuspected.—*Amer. Jour. of Surgery.*

A persistent, chronic discharge from the nose should lead one to suspect chronic disease of the frontal or other accessory sinus.—*Amer. Jour. of Surgery.*

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 6.

ORANGE, N. J., DECEMBER, 1907.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

ANNUAL ADDRESS OF THE THIRD VICE-PRESIDENT.

TOXINS AND ANTI-TOXINS.*

By B. A. Waddington, M. D.,
Salem, N. J.

*Ladies and Gentlemen, Members of the
Medical Society of New Jersey:*

In selecting me to address you upon this occasion I cannot but express to you how deeply I appreciate the honor which you have conferred upon me, and though quite sensible of the fact that you have honored me beyond my true deserts, I trust that the retrospect of forty years of medical history will not prove uninteresting to you.

A few years before I entered upon my career in medicine the discovery of ether and chloroform by Morton and Simpson respectively, rendered them men of undying fame; about the same period Helmholtz, the renowned physicist, contributed a service of immeasurable value to ophthalmology as well as to general medicine by the discovery of the ophthalmoscope. James Marion Sims at that time was in the zenith of his fame as a gynecologist. He invented, as you know, the silver suture and various instruments, for his fame as an operator and writer upon subjects pertaining to his sphere of activities was justly regarded both here and abroad as an authority of the highest order. You may not be aware that in the early sixties a few men were regarded abroad with that high esteem that the elder Dr. Gross and Dr. Agnew enjoyed, for it

was the custom at that time to treat every advance emanating from American sources with rather frigid courtesy. Sir Joseph Lister, noted for his introduction of the anti-septic method of treatment of wounds and bandaging, revolutionized the methods of surgery then in vogue and made possible the marvelous progress in that branch of medical science and the wonderful achievements attained by surgeons of the present day.

About this period Louis Pasteur, the celebrated French chemist and microscopist, attracted the profoundest attention of the medical and scientific world in general by his researches in the processes of fermentation, Siberian pests, etc. And this brings me to the theme of my address to-day, namely, "Toxins and Anti-Toxins." Pasteur, after many years of experimentation, began the inoculation for hydrophobia in 1885 and from that time forth the serum therapy has held the attention of the medical world, and has culminated in the most brilliant results in the saving of human life, and doubtless the most epoch-making event in the world of medicine and science. When the British Medical Association met in Edinburgh a quarter of a century ago, Dr. Warburton Begbie, who delivered the address on medicine of that year, deplored the fact that not a single advance had been made in medicine since the time of Hippocrates. Dr. Thomas R. Frazer, who addressed that association in the same place on the same subject in 1898 called their attention to the address of Begbie of twenty-five years before, and said that he agreed with the views then expressed; but that during the past few years a new and rational system of treatment by immunization had appeared which

*Delivered at the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

altered the whole aspect of the case, and that medicine from now on might be considered to be on a firm foundation. Whether we agree with the sentiment or not it is of little importance in this connection.

What that "firm foundation" above referred to is, may be explained by stating that the whole theory of infectious disease has been brought down to a single scientific basis, resting upon the following fundamental principle; that infectious diseases are caused by germs. This is admitted by all persons who are at all conversant with what has been done in the world of science during the last few years. Tuberculosis, typhoid fever, tetanus, Asiatic cholera, yellow fever, syphilis, glanders, pneumonia, diphtheria, etc., are now known to be caused by the presence of distinct species of germs differing in form, size, mode of growth, microscopic appearance, etc. These have been isolated and grown in pure culture, in artificial media. The causative micro-organisms of all infectious diseases have not as yet been discovered, and scientists are still working along this line. It is supposed that measles, scarlet fever, smallpox, cancer, etc., are caused by germs and that our microscopes are not powerful enough to show them. Nearly every year adds to our knowledge of diseases by the discovery and isolation of another specific curative germ. By means of these germs we can transmit disease to the lower animals and from their dead bodies can regain them again in pure culture.

We can transmit tuberculosis, tetanus and glanders by the injection of the germ of those diseases into animals, and the latter will die with all of the symptoms of the disease represented by the particular germ used. By injecting a few tetanus germs beneath the skin of a guinea pig that animal will die within four or five days with all the symptoms of tetanus of the human being, and after the animal is dead we can regain our culture again from the seat of the infection. A small portion of a virulent culture of the bacillus tuberculosis will kill a guinea pig in a few weeks and a post-mortem on the dead animal will show tubercular nodules in the spleen, liver, mesenteries and lungs, and if the animal lives long enough these organs will be found literally alive with these microscopic organisms. The animal will be eaten up, as it were, with a true consumption. So, too, of diphtheria. An injection of the living germs of diphtheria or their product—toxins—will kill a guinea pig within forty-eight hours. It is

not necessary to inject the living culture; we grow the germ in beef tea and filter it out, and one-fiftieth of a cubic centimeter of the filtrate or toxine will kill in the same length of time. Concerning recovery and acquired immunity, a person who recovers from an infectious disease is exempt from that disease for a certain time. The period may be short, as in diphtheria, probably lasting about a year, or life-long, as in the case of smallpox, measles or scarlet fever.

Various theories have been propounded to account for this immunity. Pasteur supposed that during the multiplication of these pathogenic micro-organisms in the animal body they exhausted some substance necessary for their maintenance and then ceased to grow, and the person or animal recovered being consequently immune. Chauveau, however, contended that in their growth these micro-organisms threw out some substance which accumulated to such an extent in the animal as to further prevent the development, and the animal recovered and was immune. Many theories have been proposed to account for immunity. Metchnikoff supposed it was due to the action of the white blood corpuscles. But all of these theories have been found to be erroneous. The accepted theory now is that there is produced in the recovered animal by such recovery "anti" bodies or substances which are opposed to the poisonous or toxic products thrown out by the growth of germs in the body and these substances we term antitoxins. A child that recovers from diphtheria has the antitoxin of diphtheria in its blood as a result of such recovery, and as long as the antitoxin remains the child will not take the disease again, but will be immune. An animal that recovers from the injection of the product of growth of a culture of diphtheria also has the antitoxin of diphtheria in its blood. A person or animal recovered from tetanus has the antitoxin of tetanus in the blood and the presence of this antitoxin protects against another attack. A person may have as many antitoxins in his blood at the same time as he has recovered from as many infectious diseases. An individual can be immune from smallpox by recovery and yellow fever by recovery and have at the same time the antitoxins of both diseases in his blood in preventive or immunizing amounts.

In computing the antitoxic strength of the serum from an immunized animal, ten times the minimum fatal dose is injected into each of a series of guinea pigs, together with varying amounts of antitoxin. Here

laboratory experiments have, for once at least, proved—conclusively demonstrated almost to a mathematical certainty—the power of antitoxic serum in curing infection in the lower animals. Observations of the best men in the medical profession, and the statistics of the last five years, have clearly shown the superior advantages of serum treatment over any other in curing diphtheria in the human being. Just how this action is brought about we do not know.

The action between a toxin and antitoxin is held by Behring, Ehrlich and others to be a chemical one, while Buchner and Metchnikoff maintain that the antagonistic action takes place only through intervention of some cells of the body. A few years ago Surgeon-General Sternberg, referring to the subject of serum therapy, wrote as follows: "At the present moment we are in possession of experimental data which opens a vista of possibilities in specific treatment unsuspected a year or two ago."

It was supposed that the methods which have been followed in the production of diphtheria antitoxin would apply equally as well in the production of antitoxins to all other germ diseases. Accordingly an attempt was made to produce antitoxic serums with the germs of typhoid fever, tuberculosis, etc. It was soon found, however, that the premises were incorrect, that while diphtheria and tetanus bacilli produce by their growth soluble toxins, with which animals could be immunized, the larger majority of other germs did not produce such toxins. The latter is true of the tubercle germ and attempts have been made by Koch and Buchner to extract the toxin from this germ by grinding and submitting it to hydraulic pressure and so on. By such means they hoped to get at the toxin which they supposed was contained in the germ itself. The product was used for immunizing purposes on animals but has not proved a success. It may be that the right artificial medium to grow it on has not yet been found, and that when it is found it will be possible to produce a sufficiently powerful toxin. It looks, however, as if this germ produces but very little toxin and that is the reason of the failure. If the toxin could be obtained, an animal could be found to produce the antitoxin. The germs that do produce soluble toxins are comparatively few in numbers, those of diphtheria and tetanus being examples. It has also been proven that the venom of snakes acts in all respects like a toxin. From these toxins antitoxins can be produced. Other serums have been

produced but they cannot be in the true sense classed as antitoxics.

Antitetanic serum is a true antitoxic serum and as such is of great value. While the results attending the use of this serum in cases of tetanus in human beings have not been as good as one could wish, some reports show that great benefits have attended its use. The trouble is undoubtedly due to two causes—the difficulty of early recognition of the disease—tetanus—and the lack of serum of high potency. An attempt has lately been made to diagnose tetanus in its earliest stages, before muscular tonicity has appeared, by the agglutinating power of the blood in contact with tetanus toxin. While the results so far have shown it to be possible, no one has as yet made a practical demonstration of it. Behring and Kitasato found that when the infection was delayed until the symptoms of tetanus had appeared that he could occasionally save an animal. But the chances were not nearly as good as when the injection was made, soon after the infection. The same results have followed the use of this remedy in practice among human beings. The chances of saving life are not nearly as favorable after stiffening and tonic contraction of the muscles have appeared. Injections should hence be made as early as possible. Nocard reports as a result of thorough investigation that antitetanic serum is unfailing and absolutely effective in preventing tetanus. His report is based on 2729 observations on the lower animals.

Physicians should be called early in cases of injury to the extremities by splinters, rusty nails, etc., especially when these injuries have been received in the vicinity of old barns where horses have been kept, for it is known that the tetanus germ is more often found there than elsewhere. In such instances a prophylactic injection of antitoxin serum should be made at once. The intracerebral method of injection has lately come into general use. The reason for the employment of this method is, as shown by Roux, that as the toxin of tetanus attacks the nerve centers too quickly for antitoxin to overcome its effects, it might be better to inject the antitoxin directly into the nerve centers themselves. For this purpose the skull is trephined and the tetanus antitoxin injected directly into the brain center. Clinical reports seem to show this method of injection to be a good one. Marmorek announced his discovery in February, 1895, and reported that forty-five cases of veritable tetanus have been checked at once and

cured by this serum. The serum since that time has been used with varying success in the treatment of streptococcic infection. Some observers have reported great success, while others signal failures.

It seems to be the growing opinion that there are several varieties of streptococci instead of one, and that a serum of one variety is not protective to another variety. Marmorek is supposed to use a variety of streptococci in providing his serum, but whether that will prove to be better than using a separate streptococcus for each serum the future will show. The serum has in many cases been used to good advantage, also in cases of mixed tubercular infection. Baginsky, of Berlin, has put Marmorek serum to the test in fifty-seven children affected with scarlatina. He says it is so antipathic to the complications of this disease that it reduces the mortality 30 to 40 per cent. The serum has been used with fairly good results in erysipelas and in puerperal fever, and the mortality in these diseases by its use has been reduced. It can be employed to advantage with any other method of treatment. As the streptococcus is the great poisoning germ, the serum is especially applicable in all forms of septicemia, notably in erysipelas, puerperal fever, abscesses, pyemia, etc., and in the mixed infections of tuberculosis. The future success of this serum seems to be assured.

Hankin says that the venoms of poisonous serpents are in the nature of toxins, and as such are closely allied to it, not indistinguishable from the toxins of diphtheria and tetanus. Our Weir Mitchell and Wolfenden have discovered that these venoms owe their properties to the presence of a poisonous albumin. The lethal dose for a mouse is one-thirteenth million part of its body weight. Professor Frazer, of Edinburgh, and Calmette, of Paris, have taken up the subject of serum production and have produced a serum which gives satisfactory results if used immediately after snake bites. As death from snake bites does not usually occur earlier than three hours after being bitten, it allows time for the injection of the serum to be made. The remedy has been found to be efficacious in India where many thousands of inhabitants die annually from the effects of snake bites. Antivenomous serum has been used in leprosy and has given striking results. Two bubonic plague serums are at present being produced. One Haffkine's is mildly protective but not curative, and is prepared by the immunization of a horse or other animal to a culture of

the plague germ of ordinary virulence. It is said to be protective in 80 per cent. of cases. The principal serum, however, is Yersin's, which is prepared by the very gradual immunization of a horse to an extremely virulent culture of the germ, usually taken from the body of a person dead of the disease. The serum was first tried on human beings at Amoy, China, in 1896, by Yersin, who treated twenty-three cases, all of which recovered. Since that time the Yersin serum has been tested until its efficacy is now incontestible. A French commission reports that, at Oporto, Portugal, in cases treated with the serum the mortality was only 14 per cent., while in those not so treated it was at least 70 per cent.

In 1897 Saranelli isolated and described a bacillus of yellow fever and horses have been immunized to virulent cultures of this germ. The serum is known as anti-amarillic. Reports from South America do not seem to be very favorable to this serum. A further investigation is necessary to produce a serum that will be antitoxic to the bacillus icteroides.

Ever since the discovery of Frankel's diplococcus scientists have endeavored to prepare a serum which would be curative in pneumonia. Klemperer, Emmerich, Behring and others have prepared a serum but of doubtful value. In 1898 Professor Denzi and Pane of the Royal University of Naples succeeded in producing a serum which is sufficiently powerful to be of value in this disease. Tests made in Italy by Maragliano, Rossini and others seem to be favorable to the treatment of cases of pneumonia by this means.

The medical profession is a little skeptical after Koch's experiments, regarding the so-called cures for tuberculosis. However, Behring claims to have solved the question for the production of a serum for tuberculosis. The results will be awaited with interest. DeSchweinitz, of Washington, has produced a serum by the injection of living non-virulent cultures, which has advantages over the others. The immunization of an animal with this serum extends over several years. Others have produced serums by the injection of Koch's tuberculin into animals. All of these serums seem in some way to have some sort of a beneficial action in cases of tuberculosis when not too far advanced.

The antirabic serum of Professor Lustigo for the treatment of hydrophobia seems to give good results, even better than Pasteur's vaccine. The latest reports are that

the mortality was reduced from 75 to 79 per cent. down to 53 per cent. Tizzoni and Centanni have so immunized animals as to produce a serum having a high degree of protective action. This is its only use so far. Serums have been produced by the injection into animals of the products of cancerous growths. Reports of this treatment are said not to be favorable. By cultivating the typhoid germ in an especially prepared medium Chantemesse has succeeded in preparing a toxin to the typhoid germ. From this toxin he succeeded in preparing an anti-typhoid serum. Whether it will prove of any advantage in the treatment of typhoid in the human being remains to be proved. Experiments with typhoid serum with a view to the practical use of this serum as a means of conferring immunity against typhoid are being conducted at the present time by the British Government in India. So far the results have been very encouraging. Of eight subalterns six were inoculated with the serum and the two who refused the inoculation afterwards had the disease and one died; the six inoculated ones escaped. Typhoid fever has so decimated the British troops in India that a preventative would be a great blessing. During the recent Spanish-American war more troops succumbed to typhoid fever in Cuba than were killed by bullets. The question of its prevention in army life becomes then one of great importance.

But the greatest achievements of the serum therapy are demonstrated by the brilliant results attained by the anti-diphtheretic serum in the treatment of all forms of diphtheria. The results of the experiments of Roux, Behring, Kitasato, Frankel and others is the crowning feature of serum therapy and the principal antitoxin serum thus far produced. The usefulness of this serum in diphtheria is now doubted by but few physicians and the enormous mass of evidence is in favor of its specific value. It may be affirmed that the following facts have been demonstrated:

First. That diphtheria antitoxin where generally employed has reduced mortality from diphtheria at least one-half.

Second. It has a distinctly favorable effect on the clinical course of the disease, shortening and lessening its severity.

Third. The earlier the treatment is commenced the better the results obtained, the mortality, when adequate doses of antitoxin have been given within the first forty-eight hours of the disease, not exceeding 5 per cent.

Fourth. Antitoxin is a specific against true diphtheria—that is, where the symptoms are due solely to the Klebs-Loeffler bacillus—and is less efficacious in mixed infections, but even in these forms of diphtheria it is of decided benefit.

Fifth. It is not necessary to wait for confirmatory bacteriologic diagnosis, but that in every clinically suspicious case of membranous angina, especially in children, a medium dose of antitoxin should immediately be given and repeated if required by the future developments of the case.

Sixth. Antitoxic serum is a remedy without serious after-effects in the doses which have ordinarily been employed (the after-effects, such as rashes, paralysis, etc., being insignificant in comparison with the danger of the disease); that it has no injurious action on the kidneys, the heart or the nervous system; that it does not entirely prevent albuminuria, heart failure and post-diphtheretic paralysis, because the effect of the diphtheretic toxin which has already entered the system before the administration of the remedy, no matter how soon the treatment has been begun, are not always completely counteracted by the antitoxins; though there is every reason to believe that insufficient doses do prevent any further extension of the toxic action after its effects have been produced.

Seventh. The protection conferred by immunizing doses of antitoxin is almost absolute for a short period of time—*e. g.*, three or four weeks, when a sufficient number of antitoxin units are administered—and that with a high-grade preparation, where only very small quantities of serum are required. The remedy is harmless even in the youngest infants.

In conclusion it is fair to assume, ladies and gentlemen, that within the past generation marvelous progress has been made in establishing medicine upon a truly scientific basis, and it is also fair to assume that the ensuing generation will have still greater inheritance to leave to posterity.

Moderate bloody discharge after extirpation of the gall-bladder, is most often due to oozing from the raw surface of the liver. Sudden, profuse, bloody discharge is more dangerous, as it means that the ligature has slipped from the cystic artery.—*Amer. Jour. of Surgery.*

An ovarian cyst with a long pedicle may be found in any part of the abdominal cavity. They rarely give pain unless the pedicle becomes twisted. In such a case, a differential diagnosis between it and a hydronephrosis is very difficult. One may suspect the true condition by the mobility of the tumor.—*Amer. Jour. of Surge.*

HOW FAR MAY THE GENERAL PRACTITIONER EMPLOY AND BENEFIT FROM LABORATORY METHODS OF DIAGNOSIS?*

By Robert N. Willson, M. D.,
Philadelphia Pa.

Twenty years ago the laboratory side of medicine was a force feebly reaching out for recognition. Its eyes were not yet open. It appeared to be the product of an abnormal, and perhaps of an unhealthy, conception. During its early years it was a marantic, weakly offspring. Its enemies were so numerous and so relentless that they had well nigh done it to death before it began to live. It was left shivering on the doorstep of the general practitioner by Edward Jenner one morning in the latter part of the eighteenth century (1780-1798). To-day it is a rank growth, forcing its leaves and branches in every direction, until its truest friends are forced to inquire whether medical science would not be better conserved by a judicious pruning, and by the application of the gardener's knife and the straightening rod. Certain it is that the clinician stands aghast before the claims of the thoroughbred laboratory disciple. In return the scientist finds the clinician often unnecessarily irresponsible, and indisposed to encourage advances that threaten the proprietorship of his domain. Equally galling are the condescension with which many laboratory exponents look over their glasses upon bedside methods, and the uncompromising hauteur with which the dyed in the wool clinician gazes through and beyond him. To the every-day doctor of the old school, who knows his limitations but also realizes his power, there would seem to be no midground for mutual coöperation and approval.

In response to your call I venture to address you briefly to-day as a student of internal medicine, pure and simple, including, as that term must always do, primarily an accurate diagnosis, very little therapeutics, abundant intelligence and common sense, and every scientific method of diagnosis and treatment that can be proved to be practical and available for general use. I have the heartiest respect for him who resents the employment of other means of diagnosis than those which nature has furnished him in eyes, fingers, and nose. I sympathize

with and admire him, because he accomplishes so much, when seen at his best, from so imperfect a vantage ground.

Years ago, however, was decided the race between the steam engine and the Concord coach. Not long after was settled the controversy between the microscope and the naked eye. Still more recently have the essential humors given way before bacterial and auto-toxins. With each new life and death has come the conviction that new fields are opening that stretch beyond old powers of vision. Yet each year has been sufficient for its own difficulty. Each problem has found its key! With the change in time has come the consciousness that there are aids at hand that tend to celerity, accuracy and finesse. Only Balaam's steed congratulates himself that he is an ass rather than a man. Only he whose lens has become amber-clouded and dim fails to note all that may be accomplished by employing the means that are ready to hand. And yet, how far to indulge; how deep to submerge oneself in the swiftly flowing river of modern methods and new ideas; and how to discern the good and discard the worthless, without loss of precious time—aye there's the rub—without loss of time and enthusiasm; this is a master problem that cannot be studied without profit by you and me. This is, by the way, an area over which waves a flag of truce, and on which radical and conservative may well rest from the combat, and learn by arbitration to cement an alliance that will be as pregnant with good as it has been long delayed. Owing to the thickness of the smoke of battle and to the dimming of the eyes by the sweat of exertion, the contestants have overlooked the possibility of good in one another. Had I time and space I should like to discuss the value and availability of laboratory methods for the general practitioner from the standpoint not only of diagnosis, but of treatment, and prognosis, and of the correlation of all three. Since this is beyond the possibilities of both time and patience, I choose the more important field, that of the diagnosis of disease.

At the start let me say that I am convinced there is no condition known to the doctor that can be diagnosed completely and exclusively by means of olden methods or by the new. We have, for example, left behind—I trust far behind—the willingness to pronounce a given case one of heart or kidney disease, while remaining ignorant, and satisfiedly ignorant, of the fact that other organs are at that very time primar-

*Read at the 141st Annual Meeting of the Medical Society of New Jersey, June 26, 1907.

ily or secondarily involved, and of their importance as factors in the final verdict. Heart disease and kidney disease are only partial diagnoses. Arteriosclerosis is often the underlying cause of one or both, and it may be that in the given case this condition cannot be discovered either by finger or eye, and yet appear plain through the ophthalmoscope, the microscope, and the test tube. We are also beginning to react, let us hope, from that recent state in which many have seemed content with a diagnosis partially arrived at through laboratory methods, to the neglect of the far simpler, and even more indispensable employment of nature's contribution to the physician's equipment, the hand, ear, and eye. I am personally more than willing to concede that certain of the laboratory procedures now in vogue are of greater influence in the display of one's bedside importance, than of actual benefit to the patient or his physician. The principle I would lay down and reiterate is this—and I beg that I may not be misunderstood—we must employ to the full measure of its utility every available help to a knowledge of the precise condition under diagnosis or treatment. Once grant the truth of my premise that every known aid to accuracy must be utilized, and I shall lead you to the main object of this discussion, the practicability of scientific methods for the physician, wherever and under whatever circumstances he may be found. Let me submit another proposition that will hardly invite criticism. The first years of the medical man's life offer little prospect of comfort or ease, and occasionally afford not even a return that guarantees the daily bread. I would suggest the scientific side of medicine as the logical as well as the most promising legitimate means of support for the young man, and an avenue to success that appears broad and smooth beside the rocky, winding path up the mountain which our fathers have climbed and are climbing still. Let me ask of myself and you three questions, and in their brief answer lay the subject before you and those who come after in what appears to me a businesslike way: I. Are laboratory methods useful and necessary in the diagnosis of disease? II. To what extent are laboratory methods available for the general practitioner? and III. Can laboratory methods be used by the well-equipped physician as a means to dignity and self-support?

I. Are laboratory methods useful and necessary in the diagnosis of disease? This question resolves itself at once into the fol-

lowing: Do the urinalysis, the study of the blood, sputum, and feces, of the spinal fluid, of the exudates and transudates, of cultures, of scrapings, of stomach contents, of blister-serum, of opsonins, vaccines, and antitoxins, of frozen sections at the side of the operating table, of animal experimentation, of spirochetes and trypanosomes, of anchylostoma, and the mosquito—do these render indispensable service to the physician in the diagnosis and management of disease, or can he afford to forego them on the ground of inutilty or ignorance? Will any inherent human talent compensate for their neglect?

I think we are safe in saying that no physician graduated within the last fifteen years fails to understand the value of these procedures. Probably no one who graduated twenty-five years ago had impressed on him at that time the need of their employment as aids to natural methods. Certainly we must all admit that many times our grasp upon a case is comparatively loose, because we have not availed ourselves of data within our reach. Probably no physician really believes to-day that a patient has been thoroughly examined until every secretion and excretion has been studied, also the blood, and the reports of all compared and contrasted with the physical examination. Only those who lightly weigh their words venture to assert that a diagnosis deserves the name until these data are in hand. Even when tempted to be careless we hesitate to neglect these allies not so much through timidity or ignorance as because of our appreciation of the essential value of their testimony.

Only recently I reported (in association with your president) an instance of aortic aneurysm rupturing in a child of four years, the causal factor in which was determined by, and only by, the aid of laboratory methods. In order to prepare this discussion I have temporarily laid aside the blood study of a patient in whom the diagnosis became possible only under the microscope, and even now rests between general sarcomatosis, malaria, and acute leukemia. The patient is an important one, as that term is used, and the physical diagnosis, if trusted to alone, would leave the examiner in grave doubt as to whether the case is not one of neurasthenia.

If a simple urinalysis will often indicate the presence of organic disease, if the blood examination will at times render a final conclusion (even if only partial) as to a fatal malady, if the study of the stools will reveal an unsuspected parasite or its ova

(perhaps also fatal unless removed), if the staining of the sputum or the blood often determines for or against the ravages of a dread disease—if these and many similar tests render possible and easy the recognition of otherwise obscure conditions, that might be altogether overlooked by us, no matter how scrupulous our care, and perhaps be discovered by another—if these aids to accuracy are indeed within the busy doctor's reach, then there can be no hesitation in our agreement that they must be invoked in every instance. Without them no study has been more than partway thorough.

As over against this conclusion let us place our actual practice. How many patients in a year neglected by us on the ground of expense, trouble, and carelessness? How many diagnoses missed by us, and made plain to the doctor next door who has used his test tube and lenses morning and night, at bedside and in the laboratory, usually after we have retired to sleep, always on borrowed or stolen time? How many human fellow-beings have died of disease because we have neglected our opportunities, and made a late, instead of an early diagnosis, thus losing the opportunity of cure? This is the secret of the mortality of tuberculosis and cancer, and of probably every disease with an increasing annual death rate. If he cannot prevent, let the physician diagnose in the incipency, and the odds are with him that he can cure. The laboratory in this quest is to the general examination a strong right arm. It is not the whole body; nor is it even the central mechanism.

II. To what extent are laboratory methods available for the general practitioner?

First of all, what time has the busy doctor at his command to devote to scientific medicine? I answer, if he will use the odd minutes, those often spent over a glass or a cigar, an hour can be saved out of the twenty four. Much can be accomplished in that hour. Two hours are better than one, and if he is a night-owl the additional hour may be secured when his family have retired to bed. If he is too busy and too prosperous to take (mark me, I did not say sacrifice) this time, he not only can but he must have an assistant, on whom he can depend for accurate and prompt laboratory reports. Within a short time a busy and prominent physician ordered a member of my family to the operating table, and the day arrived without the pretense of an examination of the urine. The specimen examined by me before operative measures

were allowed contained albumin, casts, and blood, a finding which alone postponed the step until a safer day. He had not taken the trouble, or he had failed to recognize the necessity of assuring himself that the patient would survive the operative procedure. In the cities there are many young medical men who are eager to assist in this line. I would advise every physician who has cast his lot in the country to visit some medical center at least once in every two years, and spend six weeks brushing up his medicine, his pathology, and his laboratory knowledge. On his return home he should revise his little laboratory stock. The simplest solutions, the shortest and most effective formulæ, the best apparatus, will enable him to do the most thorough work at the minimum cost of tension and time. One course of instruction in laboratory methods will enable him to enlarge by himself on his stock of knowledge, and to give his patients the benefit of the simple urinary and blood tests in the majority of cases. Robert Koch was in active practice when he discovered the tubercle bacillus. The well-rounded practitioner of medicine is the only man fully equipped to render and act upon a laboratory diagnosis. Every examination should be charged on the books, and the patient should be made to understand that the careful physician cannot do himself or his client justice if scientific assistance is foregone. Moreover the public is gradually learning that these tests cost money and time. It will not be long before the man who neglects the examination of urine and blood will appear criminal and crude, and will be talked of as such among his clientele.

This question of expense is of course to be considered, and there will be occasions on which charity must be exercised in the laboratory. Moreover, you protest, we cannot all take even six weeks' time for the study of modern methods; nor can we learn them with the facility of recent graduates. My friends, if you do nothing more, buy a good microscope. Then ask your neighbor to show you how to stain a specimen of tuberculous sputum, from a patient whose chest shows doubtful or indefinite physical signs. The first glimpse of the red, dotted lines, which one of my old teachers (and, by the way, one of the best physical diagnosticians under whom I have had the pleasure to learn) still persists in regarding as present, "just as worms are in a dung-heap, and with no greater causal relation"—these red bacilli, I say, will instil all the enthusiasm that will be required for the economy neces-

sary to provide for the brief journey. You have then moved at a bound from the army of standstills into that of the leaders who do all for friend and foe that can possibly be accomplished.

Again, you say, we have no spare minutes of time! We are too tired at night when we get home! We need all the sleep we can get in the mornings! We have no leisure time! Why certainly, but you might just as well add that ambition died its death in you some years ago! These excuses had little weight when you shot off the town cannon at 4 A. M. on the Fourth of July! You were the first boy up, and you were chagrined if your hand did not touch off the fuse. Boyish enthusiasm moved the young legs before daylight, and long after they were weary. So your ambition and mine must spur us on to the best that is in us, whether we are in the limelight, or folded away in a village in which the self-consciousness of work well done is the only reward. After all, life and health are at stake, and we must not lose.

A little shelf over the washstand, a gasjet and a Bunsen burner, five bottles and a few glass pipettes—one dollar's worth of apparatus and chemicals, are sufficient for the beginning. Buy the microscope as soon as possible, and transfer the burden of the diagnosis from the test-tube to the eye. By degrees save toward a blood counter (hemocytometer), and a hemoglobinometer, and until you can afford these, remember that there is as much if not more to be learned by the experienced eye from a drop of blood between a coverslip and a glass slide than with the help of the most expensive paraphernalia. These instruments will be essential later; the beginning need not wait on them. Have you ever noted the scorn in a patient's voice as she says to her doctor regarding the medical attendant of her most intimate friend, "and you musn't repeat this—why, he didn't ever examine her urine!"

Do not let a similar scorn sear you and me. We have on graduation already reached the time-signal that compels either a forward march or a retrograde. In country or city the physician has no longer the privilege of standing medically still. Progressive medicine can stand only upon an intimate relationship between the bedside and the laboratory.

Look for a moment at the beginner in practice! He has a desk, a rug, and at least one well-dusted chair that anxiously awaits the first patient. The old doctor nearby

needs a report on the urine, and has either forgotten how to make the tests, or, during a forgetfulness of some twenty years, has mislaid the reagents. He has learned that young Doctor X——, whose heels are wearing the varnish from the desk, is ready and eager to do laboratory work. A mutual advantage association is promulgated that at once puts the young practitioner financially on his feet without a practice, and at the same time renovates the attics and store-rooms of the older man. Just a word right here to the beginners in laboratory medicine, especially to those busy men who try to work all day long and are inclined to prosecute scientific methods betimes. A hurried urine examination requires twenty minutes, the blood picture can be approximated in less time. In my own work blood, urine, and sputum (if present) are studied as a routine, and the patient, no matter how wealthy, nor how poor, is given to understand that the examinations are essential, and that either he or I must pay to have them made. They are itemized on the bill, and they are never protested, even when the other items provoke comment. Here is something tangible, something that has as definite a value as a sale over a counter, and something that appeals to the common sense of the patient, and through this channel to his pocket.

Let me advise you, moreover, if assisting an older man, to insist on sending in your own bills for laboratory work, as the surest means of preserving your identity. Send them as soon as the work is done, and charge enough to render the beneficiary of your scientific assistance conscious that you are actively interested in his case, and yet not enough to deprive the older men of your services through extortion. In the cities there will be an abundance of laboratory work to do, the sentiment having already been created as to its justification and need. In the country it will be incumbent upon the coöperation of the older and younger men to introduce a similar regime, perhaps at a nominal cost, until its place be won. The oncoming generation of young men will in this way be supported by the patients of the old. The writer obtained almost his entire subsistence during the first two years of his medical experience by means of his laboratory, used as an ally and an adjuvant to his own and other men's bedside study. When he found it necessary to relinquish the personal portion of the laboratory work to others who were making it a specialty, he experienced a keen regret, because his indi-

vidual control of the helm in a given case had to this extent passed from him. Far more important than the comfort of the medical fledgling will be the stimulus given to medical science in its entirety, in the accuracy newly possible in diagnosis, prognosis, and treatment. Provide yourself with a laboratory assistant, and you will not dare to slip up at the bedside. Use infinite care in your methods of physical diagnosis, and your assistant will not feel at liberty to become slovenly in the laboratory. Each should cheer and spur on the other—physical diagnosis and laboratory scrutiny—no room for jealousy between kith and kin.

And finally,

III. Can laboratory methods be used by the well-equipped physician as a means to dignity and self-support?

We have already suggested more than one indication that laboratory medicine has opened a new field for the young and poor man. Let him advertise his willingness and ability among his medical fathers and brethren as widely as he will. There are always many who cannot or will not discharge their own laboratory duties. These will welcome him, and use him, and bring him into contact with patients who may find him valuable and available in later years. Let a young man become known as a careful worker, and he will some day be compelled to make his charges prohibitive in order to preserve for himself sufficient time to finish the work for the day.

Nor need the older practitioner relinquish altogether the cunning of his laboratory days. What a comfort as a clinician to be able by first knowledge to control the work of the laboratory man. What a satisfaction to sit over the blood picture of an unusual, and difficult case, and oneself determine the underlying cause of a surface condition—or to verify the findings of the specialist. I shall never forget the inspiring thrill that ran through me years ago when an old Florida doctor, hair as white as the fallen snow, eyes so dim at sixty-seven years that a magnifying lens had supplanted his watch crystal—when this old hero came to me with the demand for a course on microscopy. I can to-day see the tear steal down his cheek when he learned that this opportunity had passed before he knew of its existence, that it was now only for younger eyes and offered no access to him.

Have you heard the young graduate measure his older colleagues and instructors, the one with the other? "This," with a wave of the hand, "is an all-round man; this is an

old fellow, his methods are high and dry, and out of date; there is the brightest man I know, but you cannot depend on him! But look! look, friends! here comes the pride of his students, and of the medical community—an oldish man, hair white, but a man erect and proud in moral and physical carriage, even in the twentieth century a physician abreast with the times, well trained, continually polished, never weary, ready for each innovation that has merit, instinctively discarding the useless without delay; this is the young man's and every man's ideal of the modern physician." The chest must be bare if he is to examine it. Percussion is not transacted through the clothes. Ear and stethoscope, hand and eye, claim immediate contact with the skin, and every part examined. Only the ignorant and inexperienced can make a brilliant diagnosis through a shirt bosom or a pair of trousers. The patient, moreover, is to this physician still a person, never a case. The doctor may at one time be a scientific consultant, and a large hearted man. For a moment at least he has a life in charge, and what implicit trust is at that moment is in his keeping. Moreover, the family doctor has not gone and never will go, whatever may be said to the contrary. The specialist is also here to stay. The laboratory over-enthusiast is another fixture, perfectly harmless if you let him wind his own course. And in all these classes except the last you will occasionally find that *rara avis*, the sun-crowned, ever-gentlemanly physician, who scorns no method and flouts at no school, who executes his own work perfectly as long and as far as it is a possible thing, and then enlists the aid of the younger man, whose untempered science finds its complement in his senior's mellow judgment, his ripe experience, and in the fine balance of courtliness and charity that always marks the doctor of the old, yet ever new, school.

DISCUSSION.

Dr. Alex. Marcy, Jr., Riverton.—It affords me pleasure to open the discussion on Dr. Willson's paper. I think we can all agree with the conclusions reached by Dr. Willson in his timely and most interesting paper. It was on account of the successful employment of laboratory studies in two puzzling cases of my own recently with Dr. Willson, that prompted me to ask him to present this matter before our society at this time, and I wish to thank the doctor for the very able manner in which he has accomplished it.

That laboratory methods are a necessity for the successful diagnosis of many acute and chronic diseases, I think none will deny, and the time has come when every general practitioner of medicine

must make use of them. The laboratory worker and the clinician must work together, one the complement of the other. It has been comparatively an easy matter for this to have been successfully carried on in the cities, but until now it has not seemed feasible or possible for the general practitioner in the rural districts to accomplish it. The advances in medicine have been so rapid, however, that it has become absolutely necessary for the country doctor to avail himself of these scientific and accurate methods, if he would successfully continue to practice his art; and some way must be found by which he may utilize the work done in the laboratories. As to how this can best be accomplished is still somewhat a matter for honest differences of opinion, and it is to this phase of the question that I wish more particularly to speak. First of all, it seems to me, it will be necessary for us to convince the general practitioner that it is impossible for him to practice scientific medicine without these aids in diagnosis, and that without accurate diagnosis it is impossible to prescribe proper or successful treatment; that he does himself and his patients a very great injustice, if he is unwilling to employ such methods. He must also be alert and energetic if he would keep up with the advances constantly being made in the practice and art of his profession. A fine sense of honor, as well as of pride, should be a sufficient stimulus to make him want to know what the leaders in medicine are doing; and this should be enough to impel him to take up graduate work and study. He should avail himself of the opportunity offered in the medical schools of pursuing a course of study after his graduation; and, at least once in two years he should accomplish this. In addition, he should keep himself in touch with what is being done by reading current medical literature and attending frequently meetings of medical societies.

Many men, however, from one cause or another, will not do this; and I say that such persons are not fit to practice. It is to reach such men as this that I have advocated the reexamination of all practitioners at least once in five years. Thousands of lives are being sacrificed each year through the incompetency of the medical practitioners, and mistaken diagnoses and positively harmful treatment are the results of this lack of knowledge. I do not believe it possible for busy men to find the time to do laboratory work in detail themselves, but I do believe it entirely practicable for each community, village, township or county, to have some one man who is competent and willing to devote his time to such work. This will necessitate the education of the people to the value of such work, and the necessity of its being liberally paid for; in order that such a person could receive sufficient remuneration for his labor to make it attractive, as well as to enable him to make a living. In this connection I think the county medical society has a glorious future, for I believe it is entirely practicable for the county society to become a center for graduate work and study.

I am an advocate of medical men combining their forces, by forming copartnerships, and thus helping one another; rather than each working for self, as is the usual custom. In our smaller towns and villages, and even in the country districts, we should get together. The younger men and the recent graduates are always looking for opportunities for work, and if we older ones would encourage them and take them into our offices, making it plain to them that faithful, con-

scientious work will be rewarded, I believe that this question would very quickly be settled, and satisfactorily settled, and it would both benefit us and our patients. If it does not seem practicable for copartnerships to be formed, then an assistant can be employed who can do the detail work of the laboratory, as well as help in the careful study of cases.

I would say, then, that laboratory methods are absolutely essential for the successful practice of medicine; that the county medical society should be the centre of graduate medical work and study, as well as for the diffusion of a knowledge of the recent discoveries, and latest practical methods of treatment; that copartnerships and assistants are both practicable and desirable; and that a quickened conscience and an honorable effort on the part of each one to do his very best for those who commit their lives into his care and keeping, is a sufficient incentive to make each of us earnest and continuous students, unwilling to give those who come to us for advice, anything but the very best.

Dr. H. A. Cossett, Morris Plains.—I just wish to make a few remarks concerning the busy practitioner, or the man that is too busy to look after his own laboratory work, when he has to send a specimen to a laboratory. During the past few years I have been connected with the New Jersey State Hospital, doing pathological work, and I must say that you would have been surprised to see some of the specimens that come in—specimens sent from men that you would think would know better. They would send in a specimen of blood, all dried up, nothing left of it, on a piece of glass at least a quarter of an inch thick, and with absolutely no history accompanying it. From this they would expect you to make a blood-smear. There were specimens of urine that had been allowed to stand for from six days to two weeks, with no preservative in it. These were all decomposed, and the odor from them was so strong as almost to knock you over. Such are the specimens sent to the laboratories, and this is the reason that laboratories cannot get out the kind of reports they would like. They have no history and nothing to go by. I think that this would be a good subject to prepare a paper on—how to present specimens to a laboratory.

Dr. Marcy.—I shall be glad to appoint Dr. Cossett as a committee of one to present such a paper at the next meeting of the society.

Dr. Emery Marvel, Atlantic City.—I think that the society should congratulate itself on having had the subject presented in such a practical way by Dr. Willson. It is an inspiration to have a way shown us to help ourselves and the community. Hearing such a paper is an inspiration to do better work. Dr. Willson has taught us all a lesson, and I think it is quite practicable to apply the recommendations given by him. He has easily and delightfully modified his tone as to the men who make excuses that they are too busy. If the man's work is such that he cannot give the time to laboratory methods, he is able to secure assistants, who will give him the benefit of their knowledge. It is to his interests and to the interests of the profession that he should have this knowledge at his command. However much benefit he may do his patients without the aid of laboratory methods, it is better for his well being and the respect of physicians as a body for

him to make use of every help in reaching a correct diagnosis. I contend that not only are the practical results of laboratory information desirable, but that they are in the power of every man to obtain. I, for one, am grateful that we have had such an inspiring paper from Dr. Willson.

PNEUMONIA: ITS ETIOLOGY, PATHOLOGY, SYMPTOMS AND TREATMENT.*

By Edward W. Sprague, M. D.,
Newark, N. J.

Pneumonia in its true fibrinous or lobar form is an acute infectious disease with a characteristic primary pulmonary lesion and various general reactions due to bacteremia and toxin absorption.

The disease is one of the great world problems, causing approximately three per cent. of all illness and over eight per cent. of the deaths.^{1 2 3} Although great advances have been made toward truth in regard to its nature, our abilities to cure are very meagre.

Etiology. The diplococcus lanceolatus is the ultimate cause of fibrinous pneumonia in nearly all cases. Very rarely the pneumobacillus of Friedlander is the infecting agent.⁴ The pneumococcus normally leads a saprophytic existence on the mucous membrane in the upper air passages of a majority of all individuals.⁵ Its ordinary virulence is of such potentiality as to be harmless to the normal physiologic state. Thus for pneumonia to occur, either the pathogenic potency must be greatly increased or the condition of the bodily defenses must be lowered, and the great importance of this latter condition has been experimentally and clinically proven.⁶

Among the predisposing causes, age is a factor only as it influences the powers of resistance; social conditions affect as they favor development and transmission; existing disease, public or personal unhygienic environment, trauma, underfeeding and deleterious habits increase the liability. Fatigue may temporarily and quickly lower resistance and in connection with exposure, causing rapid cooling of the surface, is the greatest of the auxiliary causes.² This explains the increased incidence in the third and fourth decade and in the male sex. Exposure is especially likely in the early spring months. Previous attacks increase the susceptibility, and epidemics influence causa-

tion since the virulence of the micro-organism is then increased, owing to its recent passage through the body.

Pathology. The local lesion is an inflammation of the lung parenchyma⁷ due to the injury caused by bacterial efforts to enter the economy. The poisonous microbic products developed in the alveoli act upon the contiguous alveolar cells in varying degrees and inflammatory reaction follows. Whether capillary hyperemia or affection of the alveolar epithelium is the first essential anatomico-pathologic feature has recently occasioned much discussion. The weight of evidence favors the latter view.²

In the earliest phase intense hyperemia and loosened alveolar cells are the chief conditions. Later an inflammatory exudate appears and completely occupies the alveoli and terminal bronchioles. The exudate contains large numbers of erythrocytes and leucocytes in normal proportion and increased fibrin elements which result in rapid coagulation and conversion of the lung into a solid mass. Owing to the color imparted by the large number of erythrocytes, the condition is designated red hepatization. This period marks the acme of the inflammation and continues a variable time. However, the cellular elements in the coagulum are gradually changing; the erythrocytes and epithelium slowly degenerate and the leucocytes come to predominate. This alters the color to gray, constituting the gray stage. The gray stage is the beginning of resolution, which is continued by means of the phagocytic action of the leucocytes and certain conditions of autolysis. The resulting detritus is removed by means of expectoration and the lymphatics, chiefly the latter. The alveolar and capillary injuries are repaired in the meantime and here may be mentioned that the inflammation ends before advanced destruction or necrosis occurs. Occasionally the exudate does not resolve. In which instances the number of cellular elements present, especially the white cells, is in greatly diminished proportions, showing the important role of the leucocyte in providing autolysing ferments.⁹

Various associate lesions occur, as inflammatory oedema in the adjacent tissue, congestion in the smaller bronchi and a varying degree of fibrinous pleurisy. More or less constant changes occur in other tissue cells acted upon by the microbic products.

Symptoms. The clinical symptoms vary with the virulence of the infecting organism

* Presented at the 141st Annual Meeting of the Medical Society of New Jersey, June 25, 1907.

and with the state of the physiologic resistance of the host. The latter is the principal factor as is experimentally shown when virulent pneumococci produce a fatal septicemia without pulmonary lesions if introduced into the trachea of a sensitive animal, while similar inoculations in a more resistant animal result in typical fibrinous pneumonia.^{8 10}

INCUBATION. Microbic poisons differ from alkaloids in that the toxic action is not immediate.¹⁰ The time from the initial pathogenic growth in the air sacs to the first definite reaction is the latent or incubative period which usually lasts twenty-four hours and varies from a few hours to several days.² During this time indefinite symptoms occur in about one-fourth of cases.¹¹ Throughout this latent stage bacterial growth is established and bacteria with their products are constantly entering the host. These together stimulate the defensive mechanism in direct ratio to its anti-pneumococcal powers.

GENERAL REACTIONS. The prime action of the toxin is upon the nervous centers. The initial feature is a tendency to hypothermize the economy,¹⁰ which reacts and attempts to prevent heat dissipation by constriction of the surface capillaries. This peripheral condition through some ill-defined mechanism, acting as a stimulus causes generalized muscular activity, clinically known as the chill,¹² which increases metabolism and therefore heat production.¹³ Shivering is nearly always present in some degree and most often as the characteristic single severe rigor, lasting a few minutes to several hours. Chills are usually absent in pneumonia intercurring among other affections. Rarely in very young children, less often in older ones, convulsions of central origin may mark the onset, showing instability of the nervous centers. Chills may be absent in the aged which indicates less active defense.¹⁴ Various disturbances of innervation may cause abdominal or arthritic phenomena as atypical onset.¹⁵

FEVER. Certain unknown substances of microbic origin cause an exaggeration of the thermogenetic processes. The heat regulating apparatus is disturbed—heat production being greater than heat loss. Whether this is purposive or not is not known, as we are entirely ignorant of the stimuli governing heat loss,¹³ however, one is often impressed with the almost uniform fatality in hospital material among low temperature cases.¹⁶ Increased temperature is a constant feature in pneumonia. It is pres-

ent during the chill and rises rapidly, attaining a high degree in about twelve hours, at which level, with more or less wide daily variations, it remains throughout the disease. In over seventy-five per cent. the temperature ranges between 102 degrees and 105 degrees F.¹⁷ Fever is usually of the continued type; but may show all forms. After continuing from three to eighteen (usually five to nine) days in cases pursuing the typical course a sudden defervescence occurs and the patient passes from a condition of stress to one of comparative ease.

The crisis, as this phenomenon is designated, occurs when the organic defences have neutralized the toxin or rendered the system immune to it; or destroyed, or extensively attenuated the bacteria so that normal physiologic action may be established; or perhaps some inherent growth properties of the pneumococcus may be the determining factor, since cultures usually die in a few days¹⁸ and in pneumonia bacteria rapidly disappear from the blood about the time of crisis.¹⁹ Crisis usually occupies twenty-four to thirty-six hours, and the temperature may be subnormal a few hours after. When fever subsides by lysis the hypotheses advanced consider the local process as being in varying stages of development or that the immunity is gradually produced.

EMACIATION. The enormous oxidation of the tissues produces great and rapid weight loss, often equaling one-sixth of the total.²⁰

PAIN. Pain is not due directly to inflammation in the lung, but to associated pleural inflammation, which explains the severity in lower lobe infection and the diminished intensity in upper lobe involvement, as motion of the pleural surfaces is more limited in the latter. Pain is not widely disseminated and is usually referred to the mammary distribution of the intercostal nerves. The lower six of this group supply the abdominal wall as well as the parietal and diaphragmatic pleura, so that in low pneumonia pain may be referred to the abdominal endings.¹⁷ The eleventh nerve supplies the iliac region and reflexly may give rise to pain symptoms as in appendicitis. Pain is rarely unendurable and generally ceases as the pleural exudate suffices to protect the inflamed surfaces.

DYSPNOEA. The characteristic dyspnoea in pneumonia is one of frequency, generally beginning with the chill and ending after fever terminates. This condition probably results from the excitant action of the toxin²² on the vagus and the irritation of its

pulmonary branches by the local process.²³ The venous condition of the blood and the temperature do not alone account for dyspnoea, as the blood is more venous in bad bronchitis and there are equally high fevers without similar dyspnoea. The extent of lung involvement, providing it is limited to one lobe, makes little apparent difference, since the function of respiration may be carried on when three-fourths of the lungs are out of use.¹³

COUGH. This symptom is a reflex phenomenon through the pneumogastric nerve and is produced by stimulation of the nerve endings in the larynx, posterior part or bifurcation of the trachea or in the inflamed pleura. In upper lobe involvement cough is less marked owing to the lessened pleural excursion with resultant diminished irritation. Cough removes material which the cilia have passed into the larger bronchi, whether by means of a vis a tergo or by a suctional action due to the explosive escape of air following the sudden opening of the glottis, has not been definitely determined.¹³

EXPECTORATION. The sputum contains fibrin, epithelium, blood cells and pneumococci. It is extremely viscid, due to the fibrin and bronchial mucin. As the exudate is hæmorrhagic the sputa is blood tinged in corresponding degree. The amount is small (5 to 10 ounces in 24 hours²⁴) owing to inability of cilia to pass the tenacious material rapidly forward.

THE CIRCULATORY SYSTEM. In pneumonia resistance in the pulmonary vessels is increased, thereby adding work to the right heart. The toxin of pneumonia is directly injurious to the myocardium²¹ and accounts for the more rapid exhaustion.²² The diseased heart is not only more easily fatigued, but more readily distended. However, the cardinal feature in circulatory weakness is the vaso-motor condition.²³ Experiments demonstrate that extreme vaso-motor dilatation, especially in the splanchnic vessels, is the terminal cause of death in animals,²⁶ and, contrary to the usual opinion, blood pressure maintains a tendency toward reduction throughout the disease in man,^{24 27} and is below normal in the more severe cases. The pulse conveys the impression of high tension but the great amplitude deceives, for mean tension is actually normal or low. The lowered blood pressure reflexly stimulates the weakened heart to more rapid action,¹³ which frequently inaugurates a sort of vicious circle. The hypertrophied muscle of previous cardiac disease is a *locus minoris resistentiae*. The

slow pulse after pneumonia is due to changes in the heart muscle and is a sign of weakness.

THE LUNGS. The pulmonary signs depend upon definite physical laws of sound transmission. At the onset the over-filled capillaries and oedematous parenchyma reduce elasticity and air capacity, which changes the normal resonance to slight tympany. At this time breath sounds are diminished and a fine crepitant rale is heard at the tip of inspiration, produced as inspired air passes through the congested bronchiole endings and separates the adhesive alveolar walls. As the exudate fills the air sacs the rale disappears and the vesicular element is removed from the respiratory murmur. The air column in the bronchi leading from the diseased area is now more or less quiescent and this condition, together with the consolidated lung, directly and more readily transmits the harsh inspiratory and expiratory sounds of bronchial breathing and voice vibrations. Complete obstruction of the large bronchi would obliterate these sound waves.

Consolidation marks the acme of the process, and in the remaining stages the signs of onset reappear in reversed order modified by the profuse and less tenacious condition of the exudate which produces many moist rales of all description. These general principles are modified in kaleidoscopic fashion over the consolidated areas by associated bronchial inflammation in the larger tubes. In upper lobe pneumonia the alveoli are not always completely filled with exudate,² which necessarily alters the physical findings. An extensive pleurisy modifies by superadding its own friction sounds and obstructing all sound waves from the lungs in proportion to the amount of interpleural exudate.

THE BLOOD. Blood toxicity is increased. The pneumococci are present in every case and have frequently been demonstrated before the physical signs.¹⁹ The bacteria usually quickly disappear with the temperature fall; but have been found as long as fifty-six days after and their virulence does not seem to be diminished.²⁹

The blood serum is not bactericidal; but an undetermined substance appears from which the pneumococci form large quantities of acid.³⁰ This is present with great constancy during the attack but disappears rapidly after crisis.³¹ It may have a detrimental influence upon the microbic growth or on the other hand may seriously affect the economy since the capacity of the blood

to carry CO_2 is greatly lessened if sufficient acid is present to partly saturate the alkali.³² Recently the idea has been ventured that an acid intoxication may be a factor in the toxemia; but the present methods of estimating the alkali are unreliable and sufficient work has not been done to permit deductions.³²

Leucocytosis is nearly always present and is marked and rapid, bearing a direct ratio to the temperature in most cases. It is a measure of the effort of the system against the disease and probably constitutes the most important part in the defense. The number of virulent organisms in general bears an inverse ratio to leucocytosis.³³ The extensive disintegration of the leucocytes probably accounts for the excessive formation of fibrin ferment which produces the high coagulability of the blood.^{32 34}

The opsonins in pneumonia have not been extensively studied. In the recorded work the index is low at the onset where it remains stationary for a time, then gradually rises to normal a few hours before crisis, continuing to its acme a short time after, when the decline to normal occurs, thus in the main corresponding to the negative and positive phases of Wright.^{35 *}

The erythrocytes are diminished proportional to the severity of fever and hæmoglobin is rapidly reduced. Blood plates are diminished; but rapidly increase with temperature fall.

The Nervous System. The nervous system suffers from the toxemia in varying degrees from a slight cortical irritation to violent and destructive conditions. In alcoholics and children or others with a predisposed nervous system nervous symptoms may dominate the disease. Delirium may be due to exhaustion. Delirium is more frequent in upper lobe involvement, as the return venous flow is retarded, exposing the brain to prolonged action of the toxin and reducing brain nutrition.²

The Kidneys. The urine shows the peculiar changes of infectious diseases plus a characteristic diminution of the chloride excretion which is due to retention of chlorides in the exudate.

Treatment. The mortality rates of pneumonia have held a discouraging level, and in spite of the procession of drugs no sure weapon has been found to defend the

body. Time after time the medical world has listened to the merits of the numerous and widely heralded specifics and as often has the physician returned to his weaponless state. With two prime factors of variation, in the class of material affected and the virulence of the pneumococci from season to season, nothing can be more uncertain than the fatality in a limited series over brief periods and from such statistics the most conscientious deductions err.

Prevention expresses the greatest power of medicine and the principles are based upon the etiologic facts. The pneumococci should be removed from the mouth and throat by local cleanliness, and to prevent predisposition all the laws of personal hygiene must be observed. The disease should be regarded as contagious, and since bacteria from affected cases are of increased virulence³⁶ and minute drops of the sputum spray may remain suspended in air over twenty-four hours, direct contact should be avoided as far as possible. The pneumococci may remain viable in moist sputum for several days,³⁷ hence measures to destroy the sputa should be enforced.

Treatment depends upon an understanding of the pathologic conditions and that the defensive powers in this disease lie entirely in the individual. Therefore strength must be conserved. Absolute rest—quiet not disturbed by useless measures, proper nursing and diet with attention to the emunctories will almost appear abortive in some and greatly assists all. Fresh, cool air increases respiratory exchanges, metabolism and combustion, reduces respiratory frequency which adds greatly to comfort and this measure marks an advance in pneumonia therapy. With these methods well instituted, interference is to be avoided unless positively indicated.

Specific treatment is the ideal; but as yet we can neither abort nor cure true pneumococcic infection as manifested in its pulmonary form.^{24 25} Alcohol, veratrum, arsenic, pilocarpine, digitalis, quinine and potassium iodide have enjoyed temporary distinction as specifics.

Biologic therapy in its application to pneumonia has been disappointing. The toxin is of the endogenous type,⁴ and efforts to produce an antitoxin against endotoxin of sufficient potency to be useful have been unsuccessful. Neither has a bactericidal serum been discovered of sufficient strength to materially affect the bacteria in vivo. The recent work of Wright has opened new avenues for thought and the vaccine treat-

* The more virulent the pneumococci, the less they are opsonized. A substance designated "virulin" has been extracted, upon which this phagocytic susceptibility or resistance seems to depend. —Rosenow (*Jour. Inf. Dis.*, Vol. iv, No. 3.)

ment has been suggested.³⁵ Generalising upon the facts, it seems reasonable to consider the economy as reacting to the verge of limitation from a tremendous inoculation. The bacteriemia exists from the onset and there is a constant influx of microbic products from the diseased area. To now attempt further stimulation of opsonic power by vaccination in this violent acute condition might be the final point in destroying the equilibrium of the highly taxed body.

Vaughan rendered animals immune to pneumonia by injections of yeast nuclein. It seemed to act by stimulating some of the protective functions against bacterial invasion.³⁸ The tendency of the present knowledge points to the important role of the phagocytes in this disease.

Toxemia is relieved by neutralization or elimination, or augmentation of the tissue resistance since the intensity of the poisoning is directly proportional to the affinity of the toxin for the cells. Elimination is increased by increasing fluid intake either by mouth, rectum or subcutaneous route, provided the kidneys are not seriously damaged and the heart competent. Isotonic saline infusions mildly increase leucocytosis and dilute the toxin not adherent to the cells as well as dissolve out small amounts of that attached.¹² Ringer's solution is preferable as the potassium and calcium salts have essential actions upon the heart. This line of treatment seems ideal; but adds heart work. It is safe early in the disease; but later when the dominant question is one of vaso-motor and heart power the increased work counterbalances the value.

The idea that a percentage of the toxemia is due to acid intoxication has led to the employment of alkalis; but the applications have been too limited to permit conclusions.³⁹ Sweating is only slightly efficacious as a toxin eliminant, since Bouchard shows that thirty-two grams of blood contain more toxin than ten litres of perspiration.¹⁷

Various methods with an aim of limiting the lung process have been advocated, such as venesection and local applications⁴⁰ from which it would seem, in the light of the present knowledge, that the effect had been confused with the cause. The exudate is purposive, and though it may be above the needs and even detrimental, our measures do not limit the determining factors of the infection. Furthermore, the severity does not always correspond to the extent of the involvement.

The greater bulk of treatment to-day, as

in the past, consists in meeting the symptomatic indications as they arise.

Fever. Is it purposive or injurious? Animals inoculated with pneumococci pass through the disease with less consequences when subjected to high temperatures than others not under these conditions. The pneumococcus does not thrive at 104 degrees as at 99 degrees F.⁴ A moderate degree of hyperthermia increases phagocytosis (Mantel), also the germicidal power of the blood (Kast).¹⁰ The economy can endure without severe injury a temperature of 104 degrees or 105 degrees F. for several days. These facts favor the phenomenon as a conservative process; however, when the nature of the infection is so virulent and the reaction necessarily so great as to pass the usual limits, serious pathologic changes result; also when the toxic nervous symptoms predominate abstraction of heat is indicated. Light covering, mild hydrotherapeutic measures in bed and cool air best meet the demands.

Dyspnoea. Plenty of cool fresh air gives most relief. Oxygen gives some subjective ease; but is a poor substitute for the former. Improvement in the underlying heart condition may benefit dyspnoea.

Cough: Educating the control and small amounts of heroin usually suffice. Derivatives of creosote benefit the associate bronchitis.

Pain. Local counter irritation or applications of heat or cold generally control the symptom. If very troublesome, sufficient morphine should be given to render it endurable.

The Circulation. Many pass through pneumonia with no worrisome conditions, and the ice bag and hot drinks meet all indications; but frequently and usually the heart concerns the clinician more than the lungs. To determine whether the symptoms are due to cardiac weakness or vaso-motor paresis is difficult. The wide pulse amplitude conveys a deceptive sense of vigor; however, the low pressure mean with a tendency to vaso-motor dilatation must be constantly in mind.²⁸ To compensate this condition increased demands are made upon the heart which already suffers from direct muscle injury by the toxin, and the outcome depends upon its abilities to respond to the combined tax. An adequate capillary pressure which makes least demands upon the heart is one of moderate tension.

When signs of weak systole, dilatation and low tension pulse supervene, digitalis

is indicated. This drug directly increases the systolic power and assists in maintaining the essential pressure. But much caution must be used in its administration, as the toxins have interfered with vagus control and the slow pulse is often absent following its exhibition. This fact has led many clinicians to discard digitalis and believe the drug to be without effect in pneumonia or frequently over-doses were administered when the characteristic digitalis pulse was looked for as guide to the amount. Nevertheless its action upon the heart may be fully developed and its effect must be observed in other ways, as improvement in dyspnoea and circulatory conditions and increased urinary output.⁴¹ The value of digitalis has been underestimated in pneumonia. It acts slowly and over a long period, and is not an emergency medicine nor should it be given too frequently.

Strychnine as a routine is to be deprecated as the toxin is an irritant stimulant upon the nervous system²² and strychnine may hasten exhaustion by adding to this effect. Its direct strengthening action upon the heart muscle is very slight.⁴¹ It is a marked vaso-motor tensor and would seem to be indicated; but in the severe conditions of dilatation it does not affect the splanchnic vessels,⁴² unless administered in doses that are very toxic to the respiratory center and even then the effect on the blood pressure is very slight in severe cases. The drug is overused and overvalued as a heart stimulant.

Alcohol should be given to habitual drinkers and avoided as a routine. Its action upon the circulation is greatly disputed and at most is very slight. Over ninety per cent. undergoes combustion and not only technically, but in a true sense, it is a food and its value as such is not destroyed by fever.⁴¹ In asthenic cases it may be of use if begun early; but is not needed if food is easily taken. During the chill its dilating effect upon the superficial vessels is useful. It is extremely difficult to estimate its value in collapse conditions; but the opinion is gaining ground that it is of very little use.

Caffein is useful in circulatory depression as in small doses it increases the absolute strength of the heart and also stimulates the vaso-motor and respiratory centers in the medulla.

Nitroglycerine and vasodilators in general should be restricted to one rare indication, *i. e.*, when the condition is one of right heart embarrassment and vaso-motor tension is good, then a temporary administra-

tion of nitroglycerine may briefly relieve by lessening the quantity of blood to be forced through the pulmonary vessels.²⁸

Adrenalin directly stimulates the cardiac muscle and constricts the blood vessels, especially those in the splanchnic area; thereby raising blood pressure without acting upon the nervous mechanism.⁴³ Its effect is very fleeting as it is rapidly oxidized, hence it should be given often in small quantity.

When in spite of judicious stimulation circulation insufficiency progresses, camphor or the diffusible stimulants may be the sufficient last helping straw. Large flat ice bags or pressure over the abdomen may benefit when vaso-motor paralysis dominates.⁴⁴ Venesection is only indicated in cardiac failure with venous stasis, and owing to the exhausted powers of the individual little relief is to be expected from the procedure.

REFERENCES.

- 1 U. S. Census Report, 1900.
- 2 Aufrecht: "Croupous Pneumonia," *Nothnagel's Prac.*, 1903.
- 3 Mays: *Trans. Am. Clin. Soc.* xix, 1903.
- 4 Park: *Pathogenic Bacteria and Protozoa*, 1905.
- 5 Longcope and Fox: *Jour. Exp. Med.*, Vol. vii, 1905.
- 6 Durck: *Muench. Med. Wochenschrift*, June 28, 1904.
- 7 Schmaus and Ewing: *Pathology*, etc., 1902.
- 8 Wadsworth: *Am. J. Med. Sci.*, cxxvii, 1904; also *Med. Rec.*, May, 1906.
- 9 Flexner: *Med. Bull., Univ. Penn.*, Vol. xvi, 1903-4.
- 10 Rogers: *Infectious Diseases*, 1903.
- 11 Grisolles: *Traite de la Pneumonie*, 2d edit., Paris, 1864.
- 12 Laumonier: *New Methods of Treatment*, 1904.
- 13 Hewlett: *Krehl's Clinical Pathology*, 1905.
- 14 Hourmann and Dechambre: *Arch. gen. de med.* Tome xii, 1836.
- 15 Hood: *Lancet*, Dec. 30, 1905.
- 16 Gameleia: Cited in *Roger's Infectious Dis.*, 1903.
- 17 Preble: *Pneumonia and Pneumococcus Infectious*, 1905.
- 18 Park: *Carpenter Lect. Med. News*, lxxi.
- 19 Rosenow: *Jour. Inf. Dis.*, No. 1, 1904.
- 20 Huppert and Riessell: *Archiv. der Teilkunde*, 1869, Bd. x.
- 21 Adler and Weil:
- 22 Brem: *Johns Hop. Hosp. Bull.*, Vol. xvi, 1905.
- 23 Brunton: *Col. Papers, Circul. and Resp.*, 1906.
- 24 Osler: *Practice of Med.*, 1906.
- 25 Billings: *Prac. Med. Ser.*, Vol. i, 1907.
- 26 Romberg: *Archiv. f. klin. med.*, Vol. lxiv.
- 27 Babcock: *Diseases Lungs*, 1907.
- 28 von Santvoord: *N. Y. Med. Jour.*, lxxviii, 1898.
- 29 Wolf: *Jour. Inf. Dis.*, 1906.
- 30 Rosenow: *Jour. Inf. Dis.*, 1904, No. 2.
- 31 Longcope: *Jour. Inf. Dis.*, 1905.

- 32 Welis: *Chemical Pathology*, 1907.
 33 Rosenow: *Jour. Am. Med. Assn.*, xlix, 1905.
 34 Pfeiffer: *Zeit. Clin. Med.*, 1897.
 35 Wolf: *Jour. Inf. Dis.*, 1906.
 36 Park and Williams: *Jour. Inf. Dis.*, 1905.
 37 Wood: *Jour. Exp. Med.*, Vol. vii.
 38 Vaughan and Novy: *Cellular Toxins*, 1902.
 39 Rosenow: *Jour. Am. Med. Assn.*, 1905.
 40 Church: *Med. Rec.*, lxxv, 1904.
 41 Cushny: *Pharmacology*, etc., 1906.
 42 Passler: *Arch. f. klin. Med.*, Vol. lxxvii.
 43 Crile: *Blood Pressure in Surgery*, 1903; also *N. Y. Med. Jour.*, Sept. 24, 1904.
 44 Forchheimer: *The Prophyl. and Tract. of Int. Dis.*, 1906.

HYOSCINE-MORPHINE-CACTIN ANAESTHESIA.*

By Wm. J. Chandler, M. D.,
South Orange, N. J.

I ask your attention to this form of anaesthesia because I believe that it has a sphere of usefulness in many surgical operations, especially those of a prolonged and tedious character. I began its use last April and have noted its effects in about twenty cases. I can say at the outset that it is not intended to supplant ether or chloroform, but rather to supplement them. Those who expect to get as regularly profound and satisfactory (to-the-doctor) anaesthesia will be disappointed, for even when pushed to its fullest extent it does not often completely abolish consciousness nor entirely obtund sensibility.

Possibly some of you may not be familiar with the H-M-C-tablet as prepared by the Abbott Alkaloidal Co. I will therefore state that it is composed of C. P. Hyoscine Hydrobromide gr. 1-100, C. P. Morphine Hydrobromide gr. 1-4 and Cactin (from *Cactus Grandiflorus*) gr. 1-67. The hyoscine is derived from the *Hyoscyamus Niger* and has sedative, analgesic and mydriatic properties. The cactin, derived from the *Cactus Grandiflorus*, better known as the night blooming cereus, is a cardiac tonic and is intended to overcome the depressing effects of the other two ingredients. To illustrate the practical working of this tablet I will cite the effects produced in two or three cases.

Case 1. J. M., Aet 31; a strong man having a chronic hydrocele. Operation for radical cure by the obliteration of the sac. One tablet was dissolved and given by hypodermic injection at 8.45 A. M. At 10 A. M. a second tablet was given and a third tablet at 11.30. He was quite dull and asleep after the second injection, and after

the third was in an almost comatose stupor. His face was suffused, his breathing slow, deep and decidedly audible. After the second injection he could be aroused, but with difficulty. After the third it was almost impossible to get even a grunt. It is needless to say that in this case the operation was done without the slightest pain. The patient was perfectly quiet and was apparently in a deep sleep. This sleep continued for eight hours after the patient was put to bed. His pulse was quickened between ten and twenty pulsations per minute. He had no nausea nor vomiting following the operation and his appetite was perfectly normal on the second day.

Case 2. Chronic appendicitis, male, aet. 41, Austrian. Two tablets were used at an interval of an hour and a half. The operation was begun two hours after the first injection. The line of incision was anaesthetized by eucaïne (solution one-tenth of one per cent.). There was no expression of pain until the peritoneum was reached. Then he began to struggle a little. A few whiffs of chloroform were given with satisfactory effect. It was continued from time to time until the operation was concluded. Altogether about a drachm of chloroform was used. He slept for six hours after the operation, had no nausea nor vomiting, but was hungry for food. He had no recollection of pain nor was he conscious that any operation had been done until he awoke.

Case 3. Chronic appendicitis, interval operation, A. M., aet. 22, male. One tablet at 9.15 A. M. and a second at 10.45 A. M. Operation at 11.10. Patient was wide awake, very nervous, noticing everything about the operating room and, when the operation was begun, insisted that he must have ether or chloroform. The line of incision was anaesthetized by eucaïne. He made a loud outcry on the insertion of the hypodermic needle, although he did not make the slightest objection to the injection of the hyoscine two hours previously. The moment the knife touched him he began to struggle and begged for chloroform. Although we attempted to proceed as in the other cases the determination of the patient to have chloroform was an insurmountable obstacle and he was given inhalations of chloroform until the end of the operation, which lasted over an hour owing to the firm and deep adhesions of the appendix. The amount of chloroform used was about five drachms. This case illustrates a type not infrequently met with, where extreme nervousness seems to prevent the soporific and

* Read before the Orange Mountain Society, September 20th, 1907.

analgesic effects of the tablet and decidedly increases the excitability of the patient. In such cases ether or chloroform must be used to overcome these untoward symptoms, but the amount administered will be much less than when the tablets are not used. This patient had no nausea nor vomiting after the operation and was comparatively comfortable considering the severity of the operation.

One more case:

Case 4. Mammary cancer of at least one year's duration. Breast with the axillary and subclavicular glands removed. Duration of operation, two and one-half hours. Age of patient, seventy years. Three tablets were given to this patient and the operation was begun immediately after the giving of the last tablet. Anæsthesia was quite profound and on the whole very satisfactory. Cutting through the skin or the section of a nerve produced some struggling and occasionally she would say, "Oh my," but immediately again become quiet. When interrogated on the following day about it she stated that she knew nothing of the operation and did not remember suffering any pain. She had no chloroform, and during the most of the operation seemed to be in a deep sleep. This sleep continued for six hours after the operation. This patient vomited once about twelve hours after the operation.

I will not weary you further with the narration of cases but will present some of the conclusions which I have drawn from my rather limited experience with this form of anæsthesia.

(1) As to the age of the patient. My cases have ranged between ten and seventy years of age. I know of no objection to using it in persons older than seventy years, provided their general health is good and there is no special weakness of the heart nor any marked degeneration of the kidney. To children under ten years of age I should prefer to give chloroform, although half or quarter doses of these tablets may be given to them. I would not use it on infants.

(2) Operations performed under the use of this anæsthetic have been done in my cases for the relief of various conditions, as follows: Appendicitis, railroad accidents compelling the amputation of limbs, cholecystitis, mammary cancer, necrosis, phymosis, tubercular knee joints, salpingitis, hydrocele, etc. I know of no operation which might not be undertaken under this form of anæsthesia, although I would not recommend it for trifling operations nor

for those requiring only a few moments for completion. In such cases a local anæsthetic would be better. It would be especially indicated in operations about the head, face and neck, where the ether cone is so much in the way, obstructing the view, impeding the work of the surgeon and often adding another source of infection. It is also of special value in operations which are expected to be of long duration. I think that there is no question but that prolonged anæsthesia under ether or chloroform is more or less of a shock and for that reason the surgeon is continually hurrying so as to shorten the time of the operation. With this anæsthesia there is no need of haste. Indeed, it might be one objection to its use that the surgeon takes his time and may become dilatory.

(3) Nausea and vomiting are conspicuously infrequent. In only two of my cases did vomiting occur, and then only once in each case. There was no complaint of nausea at any time. The vomiting which follows H. M. C. anæsthesia has been sometimes attributed to the chloroform used to complete the anæsthesia. It undoubtedly often is, but not always, as one of my cases with vomiting had taken no chloroform.

(4) The use of chloroform was necessary in about seventy-five per cent. of my cases. In some cases less than a drachm was used. The largest quantity used in any case was six drachms. The total amount used in all the twenty cases would not have been enough to have produced chloroform anæsthesia sufficient to operate on any three of them. There is thus a great gain in eliminating so largely the use of a dangerous anæsthetic. I am also satisfied that with care the same operations could be repeated and anæsthesia maintained with a much smaller amount of chloroform. Most of our anæsthetizers are accustomed to giving ether or chloroform to patients who are not already under a previous narcotism, and forgetting this fact, they press the chloroform in these cases the same as under other conditions. In this way a large amount is unnecessarily consumed. A few inhalations from time to time as the conditions of the operation may demand will answer every purpose.

(5) Constipation and other disturbances of the digestive tract do not follow this anæsthetic as might be expected from the amount of morphine contained in the tablet; and if the ante-operation purgation has not been too free the bowels continue to act in their accustomed manner.

(6) Freedom from pain after the operation from three or four to ten or twelve hours is a very noticeable feature of this method. The patients sleep quietly in marked contrast to the restless, moaning, nauseated victims of etherization. When they awake they are more comfortable than most other post-operative cases. Neither are they tormented with that horrible thirst which follows the administration of ether so invariably that the surgeon almost dreads to visit the patient on the second day after the operation, knowing how he will be importuned for "just one good drink of water." These patients wake up hungry and are generally allowed a moderate amount of fluid food at an early date. Some of my patients had taken ether previously and they commented on these differences with the greatest satisfaction.

(7) The pulse rate is generally quickened in spite of the cactin. The pupils are dilated by the hyoscine. In such cases I have omitted the third tablet and have used an eighth or quarter grain of morphine alone. In using a new remedy I was naturally conservative, and in most of the cases used only two tablets, completing the anæsthesia with chloroform. I am quite satisfied that most of these cases could have borne three tablets and would have had a more satisfactory anæsthesia therefrom.

(8) This hyoscine-morphine tablet of the Abbott-Lanphear formula must not be confounded with the scopolamine-morphine tablet which has been used for anæsthesia and which has proved to be a very dangerous agent. I call especial attention to this because most physicians are not aware of the difference between scopolamine and a pure hyoscine. This is not surprising when we know that the two drugs have the same chemical symbols and are described in the U. S. dispensatory as having the same properties and effects. But notwithstanding this they are radically different in their toxic properties, their polarization and their price. Pure hyoscine contains no apoa tropine or atropine, while these poisonous substances are generally found in the commercial scopolamine. Hyoscine is derived from the *Hyoscyamus*, while scopolamine is obtained from the *Scopola Atropoides*. Some of the preparations of hyoscine are impure and unreliable. The death rate from Scopolamine-Morphine combination is 1 in 211 cases, while from the H.M.C. tablets, which have been used in many thousands of cases (over 2,000,000 tablets have been sold) not a death has as yet been re-

ported.* The polarization test will detect the impure varieties. It is farthest from my intention to exploit any drug firm, and yet in such a case as this where it is indispensable to have a pure article I can say frankly that those who have made and introduced this compound and who are fully prepared to furnish a chemically pure preparation are the ones to whom we should naturally apply to obtain a reliable article.

(9) While in a few cases the stupor was very profound, in most of the cases the patient could be aroused sufficiently to make voluntary motion. This is of advantage in changing position, applying bandages, etc. In a few moments the patient is off in the same deep sleep and the operation proceeds as before.

(10) It is economical. The tablets cost about one cent apiece. Three tablets do not compel a large outlay for the anæsthetic. If you feel sure that no chloroform will be needed the added expense of an anæsthetizer can be dispensed with.

(11) No deaths have been reported nor any untoward effects where pure hyoscine has been used.

These tablets are highly recommended in obstetric cases. I have had opportunity to use it in only two cases and can hardly pass judgment as to its benefit. Most of the cases I have recently seen have been too far advanced in labor and I have used chloroform for more immediate effect. For the various obstetrical operations and especially for the immediate repair of perineal lacerations, where profound anæsthesia is not necessary, I think it would be admirably adapted. If the tablet is given during the labor its effect lasting for several hours would enable the obstetrician to accomplish all of these procedures without inflicting pain and without necessitating another special visit.

I present this paper with some hesitation as the conclusions are drawn from a very limited experience. But this experience corresponds so closely with that of many other observers that I commend it to your consideration. Some of you have used these tablets and all of you are more or less familiar with recently published cases. I trust therefore that the subject will elicit a general discussion. We all have a common objective. The days of vague theorizing are past. We are after facts—we are seeking the TRUTH.

* See note at the end of this paper.

NOTE.

Since reading this paper one death has been reported (see *Clinical Medicine*, Nov. 1907, pages 1376 and following). In this case it is not absolutely certain that the death was due to the drug and, if this was the cause, it is questionable whether sufficient care was given in its administration. We must not forget that we are using powerful remedies, in full doses, and when sufficient effect is produced we should *not press it further*. We certainly would not do that with chloroform or ether, unless we intend to produce a fatal effect.

I have also just had placed in my hands a communication from a well-known and reliable firm of manufacturing chemists, stating views as to the identity of pure hyoscine and pure scopolamine. They say, "The latest U. S. Pharmacopœia describes them as 'chemically identical'; and to this may be added 'optically, physiologically and clinically identical.' That results have been obtained from Hyoscine different from those afforded by Scopolamine may well be believed, but we are inclined to ascribe this either to inferior brands of the alkaloids, or to other reasons, such as idiosyncrasy. Such disappointments occur, we believe, in the use of any medicament."

This only enforces what we have said in the body of this paper that the physician must be careful where he gets his drug and must be sure that it is reliable.

NEW JERSEY SANITARY ASSOCIATION PRESIDENT'S ADDRESS.

The Evolution of Associations—With Especial Reference to the State Sanitary Association.

By Gordon K. Dickinson, M. D.,
Jersey City, N. J.

Whosoever has become interested in some topic which to him is alive, or who has seen the need for action in affairs of public or private import, and who has endeavored to call together a number of people to interest them in his scheme and to organize, can realize its difficulties, the slowness with which some perceive the need of action, the few who are ready, and the still fewer who will be good lieutenants and carry matters along. One naturally becomes philosophical and sees but little difference in the action of man and that of the lower animals, and indeed we have that in us, variously demonstrated, which shows our lowly origin. The germ cell, from which we originated, and the cells of the body possess the properties of the amoeba—of storing up energy and delivering it, of motion, and of reproduction. The pineal gland shows undeniable traces of being a rudimentary impaired organ of sight, giving

evidence that we were once lobsters, crawling on our stomachs. In the neck, particularly in embryo, we find the branchial clefts, structures more fully developed in the fishes; but, more wonderful than all is the biochemical fact that the blood of the anthropoid ape reacts as does that of man when mixed with the serum of some other animal, showing conclusively that the hiatus between man and the higher apes is less than that between them and those just below in scale.

That man has not divorced the traits inherited from what he calls, in his conceit, the "lower animals," is also shown in the activities of his brain. How variously does he deport himself in his environment, his business life, his social life, and even the way in which he takes his pleasures—all showing the stigma of the inheritance of years of habit.

For convenience of argument and application, animals may be divided into three types: First, we have the flesh eaters, strong and powerful, of great energy, able to fight for themselves and given to fighting, independent, unsociable, quick in action but of no great endurance, possessing great resisting power as to disease conditions, but generally short-lived. Second, we have the vegetable eaters, ordinarily slow of action, with social instincts, who generally live in herds and follow a leader, not naturally combative, obtaining protection through flight rather than force, of great powers of endurance, but less resistant to disease conditions. The third type is the ground-hog, who lives by himself, squatting on a little pile of dirt, self-complacent, getting fat on what he can dig in the neighboring fields, never wandering far from his home, and seeking protection, not in combat nor in assistance from others of his kind, but by hiding in the ground.

Thus we have outlined the several characteristics of man himself. Some men are long-headed, have hungry minds, restless dispositions, are not happy unless they are solving some problem, forever searching into the unknown, acquiring information through experience, and acting through intuition as well as logical deduction. These men keep a pace ahead of their contemporaries; they disturb the community by calling attention to accumulated superstitions, half truths which are fiction, irregularities the result of habit. Another class is round-headed, intelligent, appreciative, booky, pliable, ready to co-operate, excellent in execution and of inestimable value in associa-

tion work. There is one individual who never joins our societies, who does not like the members of the association in his neighborhood, who finds fault with the ethics of one and the personnel of another, ignorant of his ignorance, who hum-drums his practice and exists on experience personally acquired and what knowledge may have been given him in school life. These are the men I term "ground-hogs," of no value whatever to the profession, and often of little to the community.

The first convention historically noted is that of the fallen angels, who, after finding themselves dropped from Heaven and in a strange nether place, convened to see how they could retaliate on the Almighty. Milton reports "devils and devils damned firm concourse held, men only disagree," and it is well for man that we are not all of one mind, for had we been, as little progress would have been made by him as resulted from that historic convention. Man's first impulse is known as selfishness, which by theologians is called obliquity, but which in reality is but a survival of the inherent desire for self-protection.

As man's fore-brain grows his mind enlarges, and observations increase in number, so does his desire to meet his companions and to talk of himself, of his experiences, and of his opinions, of the weather and his neighbor's errors. The rapid growth of civic centers and increased facilities for inter-communication have so communized the masses that many matters have now come to be of mutual interest and importance. At the first it was the church and the post-office, but by rapid proliferation we have the trade unions, benevolent associations and associations connected with about every occupation and branch of study existing.

And it is but natural as therapeutic medicine was found to be inefficient and often failing to evolve success that preventive medicine should appeal to the lay mind as well as to the professional. Like all matters which almost require an arithmetical mind to see their commercial value, and which do not directly increase the wage of an individual, and which, furthermore, are almost too altruistic to be comprehended, it took years for those politically occupied to assent where assent was needed.

An association to gain success must have sufficient reason for its existence; there must be a general need for the consideration of the problem it is supposed to meet; it must be a happy combination of men

with strong individuality, good executive ability and known diplomacy, and men who are conservative, a term taken nowadays to mean people of less intuition than logic. The forceful man who intuitively sees a need, who approaches difficulties without doubt, who magnetizes and in his magnetism brings co-operation is by all odds the best leader. Lieutenants and co-operators are more faithful, untiring and helpful if of the other class. Rarely does an organization succeed which contains too many or even more than one of the first class, for jealousy will be engendered, and where, as is often the case, different roads lead to success and the fulfillment of the end, they will be severally championed and success not attained.

The needs of sanitation were first recognized by the English, and one Elisha Harris, of Albany, brought the contagion to this country, and the late Ezra M. Hunt, of Metuchen, a personal friend and great admirer of Elisha Harris, is the one who originated the movement in this State, a man of broad education, keen intellect, quick intuition, of gentlemanly bearing, courteous to all classes, interested alike in the talented and in the young physician. How well do I recollect meeting him at Atlantic City in the early 80's, when he put his arm around me and coaxed me as if I were a physician of experience to do my duty in the profession, to study and to write and read papers before the association. It was through the influence of this healthy-blooded man of sound mind brought to bear upon his confreres (men of equal mind), upon those whom he met at our State meetings and upon his acquaintances among the farmers, etc., of the State that the State Sanitary Association was organized.

The origin of the State Sanitary Association is but a repetition of the old story—brains, much time and a public scare. In 1849 the State Medical Society memorialized the Legislature requesting more complete public health laws, but without success. In 1853 the Burlington County District Society did the same. As a result of the agitation developed and the publicity obtained resolutions were again offered at the State Society meeting in 1866 by Dr. Ezra M. Hunt, again memorializing the Legislature as to matters of State hygiene. The Legislature at last hearkened and appointed a State Sanitary Commission, consisting of five physicians, Drs. J. B. Coleman, R. M. Cooper, T. Ryerson, E. P.

Nichols and Ezra M. Hunt, to report in one year.

It is evident that by this time the Legislature was alive to the public need, even though the Commission's recommendation for a State Board of Health failed of passage by a small majority. The agitation continued and district societies were called upon to circulate petitions, and a Committee on Public Health was appointed in 1868 by the State Medical Society, consisting of Drs. Hunt, Pennington, Elmer, Cooper and Wickes. In 1869 a State health law, a bill similar to that of Maine, was presented.

After repeated efforts by sanitary committees of the State Medical Society and the press, all emphasized by the cholera epidemic, at last in 1873-74 another commission of six was appointed to make extended inquiry into the unsanitary condition of the cities and rural districts. Their report, published through the press in pamphlet form, led to a sanitary convention, which was held in October, 1875. The outcome of this convention had a dual effect—the State Sanitary Association and the State Board of Health act, to which Governor Bedle affixed his signature on May 17th, 1877.

Altruistic associations, such as the State Sanitary, are often short-lived. The conditions giving origin to the same must be all important and inexhaustive that its life be continuous. Sanitation being yet in its infancy, and not a distinct profession, it is a happy fact that this association is made up of men of diverse minds: physicians, educators, lawyers, engineers, plumbers and others, so, by a process of cross fertilization a growth is obtained remarkable for vigor and productiveness. As a happy result of this complexity of membership the topics discussed sometimes have a medical bearing, sometimes a legal, or an educative, or an economic. A resumé of the work done by this society shows an unusual amount of attention accurately applied to the numerous problems brought before it. The early papers of the association were mainly on urgent and popular problems of that day, consisting chiefly of researches on sewerage, water-supply and school hygiene. Not until 1884 was any attention given to the problem of milk. It is a credit to the association that its members have not tired of reiteration; that old topics are taken up as new and fresh aspects exploited; and the papers that have gone forth to the public have demonstrated their power as shown by results obtained throughout the State.

The history of sanitation is the history of the medical mind, but not until recent years did the profession realize its power in the prevention of disease conditions. It seems strange that many of the early papers of our society were written on the influence of weather over diseases, which was one of the conditions long thought to be of great importance. As one glances over the titles of the papers read not only before this association in the past, but in the early meetings of the State Medical Society, he is greatly impressed by the great lack of accuracy, necessarily of observation, as to the cause of disease states. Perhaps the most important knowledge, the acquisition of which has led to the production of scientifically accurate work and papers relating thereto, has been obtained in the physiologic and bacteriologic laboratories. If we were to have blotted out all information derived through experimentation on live animals and in the laboratory, the retrocession would be tremendous.

Sanitation in this State has been hampered in a measure by the Law of 1887, and if the writer's premises be good and the argument correct, how much better success would have been obtained throughout the State, if, instead of Boards of Health of ten (five of whom are physicians), the law had stated that the executive officer of each city, town or municipality should appoint *one*, who may, if he so desires, take unto himself two others to act in matters of local sanitation. Less cumbrous health boards, and centralization of all authority and responsibility, would clear the atmosphere of political interference on the outside and wrangling and selfish desires on the other.

A critical resumé of this association's work develops nothing for adverse criticism. Each profession in this composite body has risen to express itself upon all public health matters, and each member has gone home better informed and more ready and willing to advance the cause of sanitation in his locality.

The great handicaps of our work are, first, the universal lack of systematic and specialized education along its lines in the schools and colleges; in other words, we have not such a person as a "sanitarian," in the same sense as we have a "physician" or a "counsellor." Another drawback is the political one. Applied sanitation being effected through Boards of Health, and the latter being appointed by politicians, the result is not a rapid solution of sanitary problems in the individual towns.

Progress in the future must naturally be educative, and educative in the broadest sense of the word. There should be in our public schools teachers properly equipped, school books and reading lessons on sanitary topics, written by a practical sanitarian, and not by an emotionalist, giving information to the young on the values of cleanliness, methods of disease dissemination, care of ordinary foods, etc.

Boards of Education have a mighty problem in the sanitary care of the children and teachers, and although it has been recognized for many years that the growing susceptible child may and does breed deformity, disease and physical disaster in the school room, still the boards have been slow in controlling defects. The influence of this association could be spent in no better way (though it may take the usual ten or twenty years to accomplish results) than to see that on every Board of Education there is at least one accepted sanitarian, who should have the power to investigate into school affairs and to demand betterment where same is found defective.

Good educative work is being done in the publication in the Annual Reports of the papers read at our meetings, together with the discussions on them. It is a question, which some of us have thought of solving, whether it would not be fairer to the writer and to the public to give a broader dissemination of these papers than they now have. Arguments are good in favor of a periodical, either conducted solely by the association, or in conjunction with the State Medical. Has this association done all in its power to further sanitation if it fails to spread to the public, lay and professional, its wonderful fund of sanitary knowledge, which is being evolved yearly? I have sometimes felt that if we had a special committee on the distribution of sanitary knowledge, who would be expected to conduct lectures and demonstrations in different parts of the State, it might be made successful, and meet a strong need.

Every individual and every society should have an ideal, and our association is strong enough in gray matter to accomplish anything it may attempt, whether it be a movement towards health-giving milk, or the suppression of tuberculosis, the extermination of flies or partisan politics in health boards.

In the words of Prof. J. Madison Watson, of Elizabeth, at the meeting of 1895, "The supreme lesson of sanitation is the need of absolute cleanliness in the State, in

the community, in the school, and in the home—personal purity of the individual, clean within and clean without, ever conjoined with beneficent activities."

IMPORTANCE OF THE CLINICAL LABORATORY.

(Editorial in the *Interstate Medical Journal*, St. Louis, November, 1907.)

Until very recently the work of the clinical laboratory, especially with regard to its value in diagnosis, has been unduly magnified at the expense of other well-established methods of this art. The brilliant results obtained from the discovery of improved laboratory technique have been among the marvelous achievements in the development of clinical medicine. Yet the over-estimation of these results, especially by those who do not understand their application, and the optimistic claims by a few enthusiastic laboratory workers, have created for the methods of the clinical laboratory transcendent values which they really do not merit. The reaction from these influences has recently been felt by the medical profession of this country. The last Congress of American Physicians and Surgeons considered this subject in a symposium on "The Relative Value of Laboratory and Clinical Methods in Diagnosis." Noted American clinicians, Herrick,¹ Holt,² Cabot,³ Emerson,⁴ some of whom are authority with regard to laboratory findings, have written extensively to correct these impressions of the medical profession of to-day.

Mistaken notions which have existed regarding the value of laboratory diagnosis have been properly aired by these discussions and their import and remedy should be seriously considered by every practitioner. The causes at the base of this condition are due to four important factors: First, mistakes of the laboratory; second, faulty interpretation of laboratory findings; third, lack of clinical experience and observation on the part of the laboratory man; and fourth, improper relationship between the laboratory expert and the clinician. Mistakes of the laboratory consist of incompetency, failure on the part of the laboratory to acknowledge its limitation, the absence of the realization of the personal responsibility of the laboratory diagnosis, and the tendency to make diagnoses from laboratory findings alone. The faulty interpretation of laboratory findings is due rather to the shortcomings of the general practitioner than to laboratory methods. Men untrained in laboratory work are especially ignorant as to the limitations of clinical laboratory means. The absence, for instance, of the positive Widal reaction during the first week of the disease is mistaken to exclude typhoid. The negative finding of plasmodia in the blood or tubercle bacilli in the sputum from a single careful examination is all that is considered necessary for a negative diagnosis of malaria or tuberculosis. The absence of the leucocyte count is taken to indicate the absence of pus infection, while we know that the leucocytosis merely measures the resistance of the patient, and when this resistance is low, as in the most severe pus infections, leucocytosis is absent. The negative findings of Klebs-Loeffler bacillus from a culture taken from the pharynx allows a diphtheria infection of the larynx or bronchi to proceed to a fatal termina-

tion without treatment. The limitation of pathological diagnosis of kidney diseases from urine was pointed out clearly by Cabot in his comparison of urinary analysis with post-mortem findings. He demonstrated, for instance, how the most severe and fatal types of parenchymatous nephritis (glomerular nephritis) produced no albumin in the urine. Others have practically established the fact that cardiovascular findings, even with a practically negative urine, were the cardinal signs in interstitial nephritis. The absence of the knowledge of laboratory limitations is most conspicuously exhibited on the part of the general practitioner by the specimens presented by him for diagnostic purposes. A piece of shriveled tissue taken at random from a growth is sent to the laboratory without other data for a diagnosis upon which depends perhaps a serious operation. A drop of dried blood is presented for a complete blood examination. A patient is sent to a Roentgenologist for a photograph of gall stone, or cyst of abdomen. The lack of clinical observation on the part of the laboratory man accounts for a great many of the mistakes coming from the clinical laboratory. Too frequently laboratory diagnosis is turned over to incompetent students and young graduates whose inexperience in laboratory technique, coupled with the lack of the opportunity of getting the other important clinical data concerning the specimens examined, is enough excuse for the unreliable diagnosis. Working independently in the laboratory, without any other knowledge of the patient, they are too prone to draw positive conclusions from only probable findings. And in order to retain the high esteem of the clinician submitting the specimens they overstep their province and make a positive diagnosis instead of merely reporting their findings. Because the urine contains a small amount of albumin and numerous leucocytes, the diagnosis of cystitis is ventured without inquiring whether the urine was from a female, and whether or not it was a catheterized specimen or one probably containing vaginal discharge. An acidity or hyperacidity of the stomach contents has frequently been the sole basis for a diagnosis of carcinoma or ulcer of the stomach. The reduction of copper sulphate solution by urine has misled the general practitioner to give a bad prognosis, when that reduction was due to a little chloroform added to the urine as a preservative. Nothing has done more to place the laboratory methods in general in bad repute than this lack of inquiry, or a demand by the laboratory man to have all the clinical data at his command before giving an opinion upon his own findings. Physical and laboratory findings are to be studied and compared. This cannot be done either in the laboratory or at the bedside alone. Nor do even these two places of investigation complete the needed observation for the finished clinician. He must be a constant attendant of the operating and autopsy room. Two European clinicians of prominence who are versed as well in the theoretical as the practical side of laboratory work speak as follows: Romberg⁸ said: "For the internist, pathological anatomy is even to-day indispensable. A thorough study of pathological anatomy is the best rule for the diagnostician." Neusser⁹ speaks of pathological anatomy as "the mistress of our diagnostic art," and says a little later concerning the value of a control of our clinical work that "the dead speak a language and this language

brings to the intelligent physician, at the bedside of his patient, calm satisfaction and lends him strength and accuracy." Strumpell⁷ regrets the error made by the modern physicians in neglecting the fine art of observation, painstaking attention to the minutest changes, and the careful consideration of all anamnestic statements of the patients, and adds that while employing the newer methods of examination he should not allow pure clinical observation to fall into disuse. The laboratory man can no more be in ignorance of the clinical aspects of a case than can the clinician be of the clinical laboratory work. This, then, properly leads up to the most important factor regarding the most satisfactory use of laboratory findings as an aid to diagnosis. The accomplishment of the highest efficiency of the clinical laboratory will be obtained when there is the proper relationship existing between the worker in the clinical laboratory and the practitioner, providing the practitioner does not do his clinical laboratory work. The laboratory man should be a consultant, with all of the privileges that an ethical consultation includes. All the information obtainable from the anamnesis, physical examination, course of the case, etc., should be placed at his personal disposal and investigation before he should be asked or even would venture to give an opinion upon any important laboratory finding. He should be allowed a reasonable consulting fee for his opinion, not merely a fee for making a special examination. On the other hand, the practitioner should personally investigate and observe all laboratory findings in order to be in a position to properly fulfill responsibilities placed upon him.

CRANKS, GERMS AND DISEASE.

(Editorial in *Critic and Guide*, October, 1907.)
An infallible means to shut up those who do not believe that germs can cause disease.

Why will people refuse to be rational, refuse to take the middle ground, which is, after all, in the vast majority of cases, the correct ground? On the one hand we have the strict laboratorian, who bases his diagnosis of disease on laboratory findings and who believes that because he can easily annihilate a germ *in vitro*, he can do the same thing *in vivo*, in the human body, and as a result neglects the tissues, failing to increase their natural resistance, and trusts everything to the chemical germicide. This type, now happily becoming extinct, is well exemplified in a number of physicians, who, following Koch's discovery of the tubercle bacillus, stuffed their patients with creosote until their gastro-intestinal mucous membrane was ruined, neglecting such unimportant things as proper food, fresh air, exercise, etc.

On the other hand, we have the generally poorly educated or senescent physician who denies altogether the power of germs to cause disease, and speaks wisely of hygiene, of "natural" methods of cure, of diet, fresh air, etc., just as if these things were recent discoveries.

All these natural adjuvants to the proper treatment of disease were known to Hippocrates, and we do not believe there is a third-year student in a properly equipped college who does not know of the tremendous importance of proper diet, fresh air, proper elimination, hydro-therapeutic measures, etc. (If there is a college that does not teach these things, it ought to be closed up.) But the third-year student knows more; he knows

the reality of the germ (we have met some quacks who even denied the existence of germs, because they never handled a microscope), and he knows that germs can as certainly and as positively cause disease and death as can an overdose of strychnine or morphine.

The irregular physicians who never belonged to, or who broke with, the regular medical profession, try to convince the laity that we are only "drug dopers." This appellation might have been justified fifty or sixty years ago. It is distinctly libelous now as to a great part of the regular profession. The rational physician of to-day knows the great importance of both the seed and the soil—the germ and the tissue—in causing disease, and in his treatment he uses every agency that he thinks might help to correct the patient's—or nature's—blunders. Proper diet, sunshine, fresh air, exercise, drugs, hydrotherapy, elimination, electricity, the x-ray, massage, psychoterapy, etc., etc.—all these agents are at his command and he makes use of them whenever he thinks them necessary. Unlike the faddist, osteopath or general crank, he is not tied down to one method of treatment.

Now to the means of proving the sincerity of the belief of those who deny the germ theory of disease. I once had a mental (?) Christian (?) "Scientist" (?) in my office discourse very heatedly of the nothingness of material agencies and of the supreme power of the mind. The mind could overcome everything; every disease would yield to it. While he was discoursing, I opened the medicine closet and weighed out on a piece of paper the minute quantity of one grain of strychnine, and then poured into a spoon about ten drops of croton oil. I told him that he could quickly persuade me of the power of mind over matter and that I would publicly declare myself a mental or Christian or any other kind of a "scientist," if he would swallow either the one or the other and remain seated on the chair for 15 minutes. He missed the opportunity to make a convert. Several times I have challenged people who denied the existence of germs, or denied their power to produce disease. "Why not prove to the world the truth of your statements once forever by swallowing or allowing me to inject into you some tubercle, diphtheria or tetanus bacilli? Why talk, talk, talk? Why not put the matter to a crucial test? If germs cannot produce disease, they won't harm you." But I have not found one person loyal enough to his or her convictions to accept the challenge, which would quickly terminate all arguments on the subject.

It is well to call attention to the necessity of proper food, of proper glandular action and elimination, but clogging up the system will alone not produce an infectious disease. It will act as a contributing cause, but the immediate exciting cause is the germ. Have you not seen a beautiful, lively, perfectly healthy child suddenly stricken with malignant diphtheria? Or have you not seen a robust, thoroughly healthy man run a nail or a piece of wood into his flesh and within a short time develop one of the most awful of diseases, tetanus (lockjaw)? What has done it? What has caused these horrible conditions? Can any rational man, professional or lay, be in doubt as to the correct answer?

Some crank physicians say that while they do not believe in the germ theory of disease and in the corresponding treatment, still they are compelled to adopt the latter because the people de-

mand it. For instance, they do not believe in diphtheria antitoxin, but are using it against their will and judgment. This is certainly a strange, curious statement. Would an honest physician administer a remedy which he knew to be injurious, but which his patient or his patient's friends demanded? As far as I know, self-respecting physicians are autocrats in their treatment; they administer what they think is necessary for the welfare of the patient; if the patient or his friends are not satisfied, they are told to look for another physician.

Our anti-vaccinationist friends often do practice vaccination according to their own confession. They do it, they say, because the parents demand it; the children must have a certificate to be admitted to school, etc.

This beautifully illustrates a peculiar variety of moral or mental strabismus. I know that if I believed, as my anti-friends say they do, that vaccination is "polluting life's pure blood stream with a filthy, nasty poison," if I believed that numerous diseases, disabilities and deaths were due to vaccination, nothing in the world could induce me to become *particeps criminis* in such a "vile, dangerous procedure." Still I have but to-day met a loud anti-vaccinationist who keeps on vaccinating at so much per. Can we have respect for such people?

LAWS (ABSTRACT) REGULATING THE PRACTICE OF MEDICINE IN THE UNITED STATES AND ELSEWHERE.

Issued by the American Medical Association.
Revised to October 1, 1907.
NEW JERSEY.

Board.—The State Board of Medical Examiners is appointed by the Governor, and consists of nine members, five regulars, three homeopaths, and one eclectic. The term of office is three years. *President*, Dr. E. L. B. Godfrey, Camden. *Secretary*, Dr. John W. Bennett, Long Branch.

Meetings.—Meetings are held at Trenton on the third Tuesday and Wednesday in June and October, and at such other times and places as the Board may deem expedient.

Fees.—Examination fee, \$25.00; reciprocal registration fee, \$50.00; recording of license, \$2.00.

Application for Licensure.—Each applicant for examination must present satisfactory proof of being more than 21 years of age, of possessing a good moral character, and of having obtained, at least, a certificate or diploma issued after four years of study either in a normal, manual training or approved high school of the first grade in New Jersey, or its equivalent as determined by the State Superintendent of Public Instruction of this State, either from credentials submitted or a certificate of examination from the State Board of Examiners for Teachers. The application must be accompanied by a recent photograph of the applicant, on the back of which must appear the applicant's signature signed in the presence of a notary or other legal official. Applicant must have graduated from a medical college recognized by the Board (see college standard) and pass an examination in writing before this board in nine sections, embracing ninety questions on fourteen subjects, viz.: *Materia medica* and ther-

apeutics, obstetrics and gynecology, practice of medicine, including physical diagnosis and diseases of the skin, nose, and throat; surgery, including surgical anatomy and diseases of the eye, ear, and genito-urinary organs; anatomy; physiology; chemistry; histology, pathology, and bacteriology; hygiene and medical jurisprudence. A general average of not less than 75 per cent. is required to obtain a license. The certificate must be registered in the county where holder intends to reside, and registered in case of removal to another county.

College Standard.—The standard of requirements of New Jersey is as follows: *Preliminary Education*—A high school diploma issued after four years of study in an approved school of the first grade in this State, or its equivalent as determined by the State Superintendent of Public Instruction of New Jersey, either from credentials submitted or a certificate of examination from the State Board of Examiners for Teachers. *Medical Education*—Four courses of lectures of at least seven months each, in four different calendar years prior to graduation from a medical college approved by this board. Exemption is granted to experienced practitioners on the basis of five years of reputable and continuous practice as the equivalent of one course of lectures in the case of graduation prior to July 4, 1903, and ten years of practice for two courses of lectures prior to July 4, 1894. This exemption will be specified in the license. Certificate must be recorded in the office of the clerk of the county in which the holder intends to practice.

Exemptions.—The act does not apply to commissioned medical officers of the United States Army, Navy and Marine-Hospital Service, while so commissioned; or to lawfully qualified consultants; or to a legally qualified physician of another State taking charge of the practice of a physician of this State temporarily during the latter's absence therefrom, provided application for permission to do so has been filed with the board and granted; or to any legally qualified physician of another State, provided such practitioner shall not open an office or a place for the practice of his profession within New Jersey; or to anyone serving as a member of the resident medical staff of a legally incorporated charitable or municipal hospital; or to any legally qualified or registered dentist, exclusively engaged in practicing the art of dentistry; or to anyone who has been practicing in the State since before July 4, 1890, provided such right to practice was obtained on a duly registered diploma, issued by a legally chartered and recognized medical institution, or to any resident of the State who has been continuously engaged in giving treatment by electricity during the past fourteen years, provided, such person graduated from a legally incorporated electro-therapeutic school in good standing; or to any legally licensed and registered pharmacist of the State actually engaged in the practice of his profession, but who does not carry on the business of a dispensary unless it is in charge of a legally licensed physician of the State; or to any legally licensed veterinary or dentist engaged in the practice of veterinary medicine or dentistry, or to any professional nurse, masseur, or electrician operating under the specific direction of a regularly licensed physician, to any one giving aid in emergency or accident cases pending the arrival of a regularly licensed physician.

Reciprocity.—With New York after January 1, 1906. New Jersey will now indorse the medical license issued by any State, after examination, whose educational, examining, and licensing requirements are substantially equal to, or higher than those of New Jersey, irrespective of reciprocity, provided the applicant complies with the conditions of indorsement. The fee is \$50.00.

Definition of Act.—Any person is regarded as practicing medicine or surgery within the meaning of this act who uses the words or letters "Dr.," Doctor, Professor, "M. D.," or "M. B.," in connection with his name, or any other title intending to imply or designate him as a practitioner of medicine or surgery in any of its branches, and who in connection with such title or titles, or without the use of such title or titles, prescribes, directs, recommends, advises, applies, gives or sells for the use of any person or persons any drug or medicine or other agency or application for the treatment, cure or relief of any bodily injury, infirmity or disease. The act applies to all persons professing and attempting to cure diseases by means of the so-called systems of "faith curism," "mind healing," "laying-on-of-hands," and other similar systems.

Reports from County Societies.

BURLINGTON COUNTY.

George T. Tracy, M. D., Secretary.

The regular quarterly meeting of the Burlington County Medical Society was held at Cole's Hotel, Moorestown, N. J., October 9, 1907. In the absence of the President, Dr. Stokes, Dr. W. E. Hall, of Burlington, presided. Dr. W. C. Sitgreaves, of Pemberton, was elected to membership. Two applications for membership were received and referred to the Board of Censors—Dr. Peter Boysen, of Riverton, and Dr. A. G. Shepperd, of Florence. The Committee on Post-graduate Work, appointed at previous meeting, made an exhaustive report and recommendations for carrying out the work. A committee was appointed to carry out these recommendations and suggestions. After other routine matters the scientific program was entered into. It was much regretted that Dr. J. S. Baer, of Camden, was not present to read his paper on "The Early Diagnosis of Cancer." In the absence of Dr. Newcombe, Dr. Alex. Marcy read a brief report of a case of Scirrhus Carcinoma of the Breast by the Roentgen Rays. The special feature of the meeting was a very able and instructive talk, accompanied by lantern slides and oxygen light on the Treatment of Cancer by the Roentgen Rays, by Dr. G. E. Pfahler, of Philadelphia, Pa. (A copy of this paper with cuts showing before and after treatment has been promised THE JOURNAL.) Dr. A. Marcy favored the Society with reports from three unusual and complicated cases of Obstetrics. A committee of three was appointed to arrange for a social session with the ladies at the next meeting, to be held in January at Moorestown. At 3.30 o'clock the Society adjourned to the dining-room to partake of a well provided dinner. After dinner the members proceeded to the Quaker Meeting House in the neighborhood and posed for the group photograph.

Beverly, N. J., November 19, 1907.

OCEAN COUNTY.**W. G. Schauffler, M. D., Reporter.**

The Ocean County Medical Society held its annual meeting at Lakewood November 7, 1907. The following officers were elected to serve for one year: President, Dr. V. M. Disbrow, Lakewood; Vice-President, Dr. E. E. Carrigan, Point Pleasant; Secretary, Dr. A. M. Heron, Lakewood; Treasurer, Dr. I. H. Hance, Lakewood; Annual Delegate, Dr. Ralph Jones, Toms River; Reporter, Dr. W. G. Schauffler, Lakewood. The Society appointed a committee of three—Drs. W. G. Schauffler (chairman), I. H. Hance and V. M. Disbrow—to serve as a milk commission.

Several names were proposed for membership, but could not be voted on at this time. An interesting discussion followed the routine business. It was suggested that the spring meeting be held in the form of a banquet with a speaker from outside the county, and a special effort will be made during the winter to enroll all the available men in the county.

SALEM COUNTY.**Henry Chavanne, M. D., Secretary.**

On the 6th ult., the Salem County Medical Society met in Salem with a good attendance of members. Dr. Strock of the Camden County Society, was present, and addressed us on Serum Therapy—Anti-tetanus especially. He was worth listening to, as usual.

Surgeon C. E. MacDonald, of Fort Mott, and Dr. E. P. McGeorge, a homeopath of Woodstown, were added to the membership. The Salem County Medical Society is solving the problem of obliterating the school boundary line.

Dr. J. M. Summerill, of Pennsgrove, read a paper treating of Diphtheria or Membranous Croup, which scored another victory for Diphtheria Antitoxin Serum. In this instance the serum was used as a last resort, "kill or cure"; the latter effect resulted and the doctor is a rejoicing convert to Serum Therapy.

The weather was bad, but the fraternal cheer, characteristic of the S. C. M. S., concluded a delightful afternoon.

Salem, N. J., November 19, 1907.

THE MEDICAL SOCIETY OF WESTFIELD.**By Frederick A. Kinch, M. D.**

The Medical Society of Westfield, N. J., at its October meeting met at the home of Dr. J. B. Harrison. Reports of many interesting cases were presented. Dr. Sherman Cooper read a very interesting paper on "Field Hospitals." The following officers were elected for the ensuing year: President, Frederick A. Kinch; Vice-President, George S. Laird; Secretary and Treasurer, W. Ray Tubbs. After the business session a social hour in the dining room completed the evening's enjoyment.

The November meeting was held on election night at the home of Dr. F. A. Kinch. After the regular routine of business and reports of cases, Dr. Tubbs read an interesting and instructive paper on "Newer Therapy," rehearsing a few of the newer things in medicine—such as the opsonic theory, serum therapy, the hypodermic injection of solution of magnesium sulphate in tetanus, and the anesthetic properties of the H. M. C. tablets. After discussion, the meeting adjourned to the dining room, where refreshments

were served and stories were exchanged until a late hour.

These monthly meetings are productive of great good among the physicians. All schools are admitted. The discussion is free and candid, always in the friendliest spirit. The doctors get to know each other better and the practice of medicine in the town is regulated.

LIFE INSURANCE.**Action by the Kentucky State Medical Association.**

Whereas, all of the great life insurance companies except the New York Life Insurance Company, have either maintained or restored the minimum fee of \$5 for each medical examination for life insurance as earnestly insisted upon by this association at its Owensboro session of last year, and endorsed, after careful investigation, by the American Medical Association, and by a larger majority of the State and county organizations; and

Whereas, the New York Life Insurance Company, over the signature of its officials, announces that it will not restore the reasonable minimum fee demanded by nearly every physician competent to make a medical examination; and,

Whereas, this company is attempting to further injure the profession by making varying contracts with its weaker and more ignorant members, paying in some cities \$2.50 for examinations, and in other places, *where they have no agents*, guaranteeing a fixed income of from \$25 to \$100 a month to men notoriously below the standard of insurance examiners of reputable companies; therefore,

Be It Resolved, by the Kentucky State Medical Association, in annual session assembled, that for each medical examination for life insurance the minimum fee shall be \$5; that we unqualifiedly condemn any licensed practitioner who accepts such responsible work for a smaller fee as guilty of a breach of professional courtesy as well as of sound business judgment; and, further,

Be It Resolved, That it is derogatory to the dignity of a physician to accept service in such a company, notoriously antagonistic to the welfare and best interests of our profession, that reputable insurance companies and other organizations needing and employing competent medical advisers be requested not to employ them, that they should not be recommended for medical appointment to political and other preferments, nor at all by the members of this association or its constituent county societies; and, further,

Be It Resolved, That while we deprecate any attempt to make such matters a test of society membership, especially as these men belong to a class in need of the education and uplift which county societies are designed to give, we urge each county society to discuss this question at its next session so that no one of its members may fail to understand that it is considered distinctly inimical to the best interests of the profession to be associated in any manner with the New York Life Insurance Company, the only company publicly proven to be honey-combed with corruption and dishonesty by the Hughes investigation, which is still under the control and direction of practically the same officers as before, and which still insists upon this policy of injustice to the medical profession.

THE JOURNAL

OF THE

Medical Society of New Jersey

DECEMBER, 1907.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

IMPORTANT NOTICES.

We call special attention to two amendments of the by-laws adopted at the last annual meeting of our State Society:—

Chapter XII, Section 3.—The fiscal year of this Society shall begin on the first day of June in each and every year. Each member received into a component Society between the first day of June and the first day of December shall pay the full assessment of the Medical Society of New Jersey for that fiscal year, but each member received between the first day of December and the first day of June following shall pay one-half of that assessment.

Chapter XII, Section 1.—No member shall be considered in good standing in a component Society until his assessment for the current year of the Medical Society of New Jersey has been paid.

It will be seen that members joining the Component (County) Societies from now till the first day of June next are to pay one dollar to the State Society and that such new members are not in good standing in their County Society until the State Society assessment is paid (nor are they eligible to membership in the American Medical Association). It is therefore earnestly requested that county society secretaries promptly notify the Secretary of the State Society of the election of new members and that the county society treasurers promptly forward the dollar for each new member to Dr. Chandler in order that they may be enrolled and receive THE JOURNAL.

To the County Society Reporters.

The Editor urgently requests every Reporter to send to him—P. O. Box 83, New Brunswick—at his earliest convenience, a list of the Hospitals (with staff if possible), sanatoria, homes for the feeble, infirm or aged with such information concerning such institutions as they have or can without much inconvenience obtain.

THE PHYSICIAN IN POLITICS.

The seed sown in previous issues of THE JOURNAL, of the Medical Man in Politics has borne fruit quicker and more plentifully than was anticipated. But we should not forget that the abundant autumn harvest this year is due in no small degree to the quality of the fruit in recent years. It has been found that the intelligent public-spirited physician has rendered most efficient service. We are pleased to insert the following editorial which appeared in the November 16th issue of the *Journal of the American Medical Association*:

The Physician in Politics.—As a rule, the physician fully realizes his obligation as a citizen to take an active interest in the affairs of the community, particularly so far as they concern matters of public health. In the smaller cities and rural districts the doctor naturally finds his influence larger than can be the case in more metropolitan communities, and his responsibility is, therefore, proportionately increased. It is not uncommon to find the physician taking an active part in politics, but the recent election in New Jersey furnished an unusual instance of political activity among the members of the medical profession. No less than seven cities of that State, namely, Paterson, Trenton, Atlantic Highlands, Summit, Rahway, Frenchtown, and Washington, elected physicians as mayors. Evidently the people of New Jersey propose to safeguard their health if it can be done by choosing experts in this line to execute their laws.

To the seven cities mentioned we add the towns of Pleasantville and Swedesboro as having chosen physician-mayors. And we are pleased to add that not only in municipal affairs but in our legislative halls the medical profession is not overlooked in the selection of competent men. We will have in our next House of Assembly Drs. James H. Lowrey, of Essex, and William E. Ramsay, of Middlesex, two able men who will worthily represent us and guard the interests—especially the health interests of the citizens of our State. We shall confidently trust all these—our brethren in the medical profession, who have thus been called to positions of honor and responsibility, to discharge their duties in a manner that shall reflect credit upon the profession and justify their selection—as they shall seek the

highest interests of the people whom they serve. We are sorry to lose the service of Dr. E. E. Haines, of Middlesex, who did not accept a renomination. He proved a most valuable member of the Assembly the past two years. The list of physician-mayors will be found under "Personal."

OUR STATE INSTITUTIONS.

Dr. Henry M. Weeks, who for several years was Superintendent of the New Jersey State Village for Epileptics, has recently accepted the position of Superintendent of the new State Institution for the Feeble-minded and Epileptics of Easton, Pennsylvania, at Spring City, Pa., and has been succeeded in his former position by his son, Dr. David F. Weeks, who has practiced medicine in Trenton and is president of the Mercer County Medical Society. The father has rendered most efficient service at the State Village, and we wish him equal success in his new position, while we congratulate the son and express the hope that his service will be as valuable to the institution and the State as the father's has been.

We also extend our congratulations to Dr. Harry A. Cotton, who has been elected Medical Director of the State Hospital for the Insane at Trenton. His past record leads us to express the belief that he will prove a worthy successor of his able and faithful predecessor, and to indulge the hope that he may be spared to serve as long and as efficiently.

The new State Tuberculosis Sanatorium at Glen Gardner was opened with appropriate exercises October 25th, an account of which will be found in other columns of this JOURNAL, taken from the Newark *Evening News*. We sincerely hope that the expressions in that newspaper's editorial, as given, concerning the future and lasting benefit this institution will confer upon the State will be realized, and that the Superintendent and Assistant Superintendent may have a large share in the credit for its beneficent results.

The three State institutions we have referred to owe their inception to the Medical Society of New Jersey and our Society can never be indifferent as to their standing after the earnest and persistent pleadings with our Governors and legislators in behalf of the unfortunate classes of our citizens for whose benefit they were sought. Two of them have already abundantly demonstrated the wisdom of the Society's efforts and the State's expenditures and the third, with wise management, gives opportunity for the accomplishment of even more beneficial results as it enters upon a work which has for its ultimate object the stamping out of a disease which so terribly afflicts humanity.

Our Society is under obligation to the State, to these institutions and to these suffering classes to use its influence in behalf of the wise management of these institutions and their support by liberal appropriations for their efficient maintenance and successful work.

We thank Dr. Hedges for the interesting report of his visit to Rochester, Minn., which appears in this issue under the head of correspondence. We shall be pleased to enlarge that department of our Journal when our members have anything of interest to communicate or desire to discuss questions that concern the profession, e. g. the report of the Committee on Medical Defence, by Dr. W. G. Schauffler, Chairman, which was presented at the last annual meeting of our society, action on which was deferred until the next annual meeting. Each communication is limited to two columns space, eight point type, in any one issue of *THE JOURNAL*.

Thanks, Mr. Editor of *Critic and Guide*, for the kind words of appreciation in your November issue—"Of all the State journals we like *The New York State Journal of Medicine* and the *Journal of the New Jersey Medical Society* the best. They are fair and consistent." Our modesty compels us to omit the last sentence. Such words of approval are not only gratefully received

but encourage us in the endeavor to make our Journal even more worthy the endorsement of our brother editors.

We acknowledge with thanks the receipt of some able and interesting papers read before two of our county medical societies and will be pleased to give one or more of them insertion in each of the next three issues of THE JOURNAL.

During the past two weeks two new institutions have been dedicated at New Brunswick, N. J., for the relief of the suffering—The St. Peter's Hospital and the Francis E. Parker Home for Incurables. In our next issue of THE JOURNAL we will give brief accounts concerning them. They give promise of great blessing to the sick and suffering.

Peruna Tablets—Rejoice! The philanthropic manufacturers of Peruna have announced to an expectant and grateful world that henceforth Peruna will also be procurable in tablet form. They say that the tablets will contain all the medicinal ingredients of the liquid Peruna. As the principal or only medicinal ingredient in Peruna is cheap whisky—so much so that the hard-hearted internal revenue officers classify Peruna as a liquor, and not as a medicine—we wonder how they have succeeded in incorporating *that* into their tablets. We follow the progress of chemistry pretty carefully, but we have not heard of any process for solidifying whisky.—*Critic and Guide*.

MEDICAL LECTURES.

William Pierson Medical Library Association. Course of lectures, 1907-08. Preliminary notice. Subject for the course, The Brain.

December 10—Modern Anatomy and Localization of the Brain, Dr. M. A. Starr, of New York.

January 14—Medical Diseases of the Brain, Dr. C. L. Dana, of New York.

February 11—Surgery of the Brain, Dr. Frank Hartley, of New York.

March 10—Insanity. Lecture to be announced later.

April—Some cognate subjects, details as to date, title and lecturer to be announced later.

May 11—Clinical night.

These lectures will be given at the rooms of the association, Stickler Library, Orange, N. J. The profession generally is invited.

Correspondence.

To the Editor of the Journal:

So many medical pilgrims have visited the shrine of the Mayos at Rochester, Minn., and have written up their impressions, that you may hesitate to add another letter to the list. A few of the things I saw and heard there, however, may be of interest to our New Jersey profession.

To begin with, one meets doctors there from every part of the Union, and I might add from all civilized countries. During the short two weeks of my stay there was an average daily attendance at the clinic of between forty and fifty surgeons. The South and West seemed particularly well represented. The city of Fort Worth, Texas, had four men there; there were men from El Paso, St. Louis, New Orleans, Lexington, Charleston, Petersburg, Los Angeles, San Francisco, Portland, Seattle, Salt Lake City, Boston, New York, New Haven, Scranton, Buffalo, Chicago, Minneapolis; in fact, hardly any State was unrepresented. From New Jersey Dr. Riley, of Elizabeth, was paying his fourth visit while I was there, and Dr. Brown, of Montclair, was finishing several weeks' stay.

The personality of many of these men was charming, and the delightful acquaintances made added greatly to one's enjoyment of the visit. Among the distinguished men present were Dr. John A. Wyeth, Dr. Ochsner, Dr. Bouffler of Chicago, Dr. Franklin Murphy of Chicago, Dr. Smith, professor of surgery at Ann Arbor, and Dr. Saunders, professor of surgery in Fort Worth Medical College. These gentlemen all participated in the discussions which took place every afternoon at the Surgeons' Club, when the work of the morning clinic was reviewed in detail, and their interesting and illuminating talks helped greatly to brighten those meetings. Breezy and unconventional remarks by returned missionaries, by globe trotting students, by beginners, and by men grown old in the use of the knife added a variety and zest to the meetings that we seldom get in our more staid gatherings in the East.

By the time five hours had been spent in the clinic and two or three more in the Surgeons' Club we were pretty well tired out and ready for the relaxation of a theatre party or a story-telling contest in the spacious lobby of the hotel.

The amount and variety and character of the work done makes this place easily "the finest surgical clinic in the world." I use quotation marks, for men who have visited all the surgical centers in this country and abroad unanimously gave this verdict. Let me give you the list of operations for one day:

Inguinal hernia direct; pelvic tumor, extra-uterine; goitre; gall bladder; chronic appendix; appendix, gall bladder and stomach; gall bladder, expl. duodenal ulcer; gall bladder; appendix; appendix; T. B. kidney, appendix; fistula following gall bladder operation; app. exp. pelvis, gall bladder; tumor of cæcum excision; pelvic inflm. and appendix; appendix; adenoids and tonsils; nineteen in all.

Questions were freely asked and as freely answered by both the brothers. In fact, it is hard to say whether the greater charm lay in the perfection of the work done or in the lucid explanations of the operators. No pomp, nor pride, nor play to the galleries was seen—just clean, quick magnificent surgery. A tumor would be removed and in three or four minutes the pathologist

would return with a microscopical report as to its character, determining whether or not a more radical operation was indicated. Perhaps I can give you no better idea of the character of the work done than to quote the remarks of two of the distinguished visitors at a delightful reception given by Dr. Wm. H. Mayo at his home one evening in honor of Dr. Wyeth of New York.

Dr. Wyeth, after giving a most interesting account of his earlier medical life (which I wish time permitted me to tell of) said that before these men began their work they studied under him at the Polyclinic in New York, and in those days he little thought that the time would come when he in turn would come to learn of them. "Boys," he continued, "I am sixty-two years old, but after seeing these men stitch up the bowel and stomach as they do I am going home and will get some dogs and work on their bowels for a couple of years until I can do it as they do it here."

Dr. Wyeth, as you know, fought on the Southern side in the Civil War, and someone said to him, "You had quite a following from the South after you came to New York, did you not, Doctor?" And quick as a flash he replied: "Yes, and earlier in my life I had a good many Northerners follow me, too."

Dr. Ochsner said it was an inspiration to see such work. That while we could not hope to attain such perfection we could at least try to come as near to it as possible. He illustrated his remarks by the following tale: A small boy had some bantams and the boy's father ridiculed him a good deal for bringing into the house such small eggs. One day the father happened out to the bantams' nests and there in the doorway was suspended a large ostrich egg, while nearby hung a big sign printed in large type so that the bantams could see it, reading: "Look at this and do the best you can!"

ELLIS W. HEDGES.

Plainfield, N. J., Oct. 31, 1907.

CONFERENCE ON MEDICAL EDUCATION.

A special meeting of the American Academy of Medicine will be held at Pittsburg, Penna., on Thursday and Friday, January 2 and 3, 1908, for the purpose of having, a full, free, frank and rounded discussion on the essentials of a medical education. According to the circular of information:

"The suggested Conference is to consider the problem of medical education for the college bred. To this end the effort will be made to determine the actual condition, formulate the problem, and attempt its solution. The so-called 'minimum requirements,' and the short courses to prepare students for the prospective advance in entrance requirements to the medical college, need not concern us, nor even the combined courses in an institution having an undergraduate and a medical department. We will seek for some plan where, by an economic disposal of time, the foundations of a broad culture can be given by the college, and the proper professional training by the medical college within a reasonable period and applicable to the unattached college and independent medical school."

For convenience of discussion the subject has been divided into two parts: I. The Medical Curriculum; II. Preparing for Medicine; and the following papers have been announced:

I.—A Criticism upon the Present Curriculum, by Henry Beates, M. D., President of the Medical Council of Pennsylvania. The Essentials of a Medical Education, by Murray Galt Motter, A. M., M. D., of Washington, D. C., Secretary of the National Confederation of State Medical Examining and Licensing Boards. The Danger of Attempting Too Much, by Frederick Henry Gerrish, M. D., LL. D., of Portland, Me., Professor of Surgery, Medical Department of Bowdoin College. Also a paper, title not yet announced, by David Starr Jordan, LL. D., President of Leland Stanford, Jr., University.

For the second part of the programme, papers are announced by the Presidents of Allegheny College, Washington and Jefferson College and others. Those who desire to participate in this Conference should communicate with the Secretary of the American Academy of Medicine, Dr. Charles McIntire, 52 North 4th Street, Easton, Pa.

INTERNATIONAL CONGRESS ON TUBERCULOSIS.

Report of the Meeting of the Committee of Arrangements, New York City, Oct. 28, 1907.

Progress along all lines connected with the International Congress on Tuberculosis, which is to take place in Washington from September 21 to October 12, 1908, was shown by the reports presented at a meeting of the Committee of Arrangements, held in New York, at the Associated Charities Building, Monday evening, October 28. Dr. Lawrence F. Flick, of Philadelphia, Chairman of the Committee, presided, and the other members present were Dr. Joseph Walsh, Philadelphia, secretary; Dr. John S. Fulton, Washington, Secretary-General; Mr. William H. Baldwin, Washington; Dr. Hermann M. Biggs, New York; Dr. Frank Billings, Chicago; Mr. Edward T. Devine, New York; Mr. Livingston Farrand, New York; Dr. J. C. Greenway, Greenwich, Conn.; Dr. Charles J. Hatfield, Philadelphia; Dr. Abraham Jacobi, New York; Dr. Alfred Meyer, Mrs. James E. Newcomb, New York; Gen. George M. Sternberg, Washington, and Dr. William H. Welch, Baltimore.

The meeting was the first held since Dr. Flick's return from abroad, and his reports of his visits to the International Conference on Tuberculosis in Vienna and to the International Congress on Hygiene and Demography, at Berlin, were interesting features of the session. More than a thousand delegates were registered at Vienna, he said, and the gathering at Berlin was quite large. The leading men in both associations are looking forward with a great deal of enthusiasm, Dr. Flick said, to the meeting in Washington, next year, and about four hundred of the members of the foreign organizations may be expected to attend the Congress. The Conference selected this country as its place of meeting in 1908 just as the Congress did two years ago. The Conference and the Congress are two distinct organizations. The International Conference on Tuberculosis meets every year and keeps up a continuous organization with headquarters in Berlin. The International Congress on Tuberculosis meets only once in three years, and does not maintain an international bureau in the intervals. Dr. Flick stated that at the International Conference, interest centered espe-

cially in the time-worn subject of the routes of invasion for the tubercle bacillus. It seems to have been demonstrated that the disease may be contracted by both the respiratory route and the alimentary route. Though this does not make us much wiser in a practical way, still it is somewhat comforting to know that the respiratory route is less important than it was once thought to be. On the other hand that information is compensated by the importance of the alimentary route.

In connection with his account of the progress made in the preliminary arrangements for the International Congress on Tuberculosis, Dr. John S. Fulton, the Secretary-General, reported that ten distinguished foreigners have consented to participate in the series of special addresses that are to form a part of the program. The names of these eminent specialists follow: Dr. R. W. Philip, Edinburgh; Dr. C. Theodore Williams, London; Dr. Arthur Newsholme, Health Officer, Brighton, England; Dr. C. H. Spronck, Utrecht, Holland; Dr. Karl Turban, Davos-Platz, Switzerland; Dr. Gotthold Pannwitz, Charlottenburg; Dr. Emil von Behring, Marburg; Dr. A. Calmette, Pasteur Institute, Lisle, France; Dr. Maurice Letulle, Paris, and Dr. S. Kitasato, Tokio, Japan. Dr. Fulton also reported that up to the date of the meeting, the Governors of twenty-three States had lent official auspices to the Congress. This not only insures official representation so far as that many States are concerned, but it insures an active organization in each of these States, that will be interested in the Congress. The States in which this action has been taken so far are California, Utah, Montana, North Dakota, Minnesota, Wisconsin, Illinois, Iowa, Indiana, Michigan, Ohio, Kentucky, Kansas, Tennessee, South Carolina, North Carolina, Maryland, New York, Massachusetts, Vermont, Maine, West Virginia, Missouri.

Reporting on the formation of State committees, the Secretary-General said that such committees had been appointed in nearly all of the States in the United States; that several have already organized and are earnestly at work. He reported also that replies have been received from various foreign countries in reference to the appointment of committees, and the replies indicate that the countries addressed will be represented in nearly every instance by exhibits as well as by delegates.

STATE TUBERCULOSIS SANATORIUM AT GLEN GARDNER.

Opened Oct. 25, 1907.

Report in the *Newark Evening News*, Oct. 25.

GLEN GARDNER, Oct. 25.—In the presence of a large throng of men and women interested in the fight against the ravages of the "Great White Plague," the New Jersey Sanatorium for Tuberculous Diseases, was formally opened here today. A special train from Bound Brook brought a large party from Trenton to the Glen Gardner station, where they were joined by another party from Newark, Jersey City and places in the northern part of the State.

In the Trenton party were Rev. Dr. George B. Wright, State Commissioner of Charities and Corrections, and George O. Osborne, principal keeper of the New Jersey State Prison. They were accompanied by their wives.

Governor Stokes telegraphed the managers yesterday that it would be impossible for him to be present, and former Governor Franklin Mur-

phy, who did so much toward making the institution a success, also telegraphed his regrets that business would compel him to be absent.

W. C. Hope, general passenger agent, and E. E. Keerwin, superintendent of the New Jersey Central Railroad, came to Glen Gardner in a private car and joined the party at the sanatorium.

Newark was represented by Dr. and Mrs. C. H. Church, Dr. and Mrs. G. O. Welshman and Dr. and Mrs. Carl H. Wintsch. At the station the party was met by a representative of the board of managers and driven in carriages through the bracing atmosphere and magnificent scenery of this region to the sanatorium, a mile and a half away. There they were welcomed and conducted through the buildings by the officers and board of managers, President Dr. William S. Jones, of Camden; Vice-President Dr. Elmer Barwis, of Trenton; Secretary Clarence M. Gill, of Trenton; Treasurer Abram L. Beavers, of Glen Gardner; Dr. Theodore Senseman, of Atlantic City; Dr. John H. Moore, of Bridgeton; Chester M. Jones, of Summit; J. Walter Ingraham, of Phillipsburg, and Dr. Rudolph F. Rabe, of Hoboken.

After the party had inspected the buildings the visitors assembled in the dining-room, where the exercises were held. They were brief and simple. Rev. E. B. England, of Asbury, offered prayer, and President Jones spoke briefly upon the work the institution expects to perform and the cost of the institution to the State.

The land, buildings, and machinery, he said, cost \$217,075, while \$8,777 was paid for the construction of the sewer. The water plant cost \$13,919, and \$10,569 was spent in furnishing the institution. The land cost \$12,994.84, and there was spent for incidentals \$20,000, making a total of \$282,334.84.

The buildings are on the southern slope of the hill, and are amply protected from the north-westerly winds by the thick forests on the north and west sides. These forests in the future will be converted into parks, with shaded walks and drives. The grounds are spacious, and tents and wooden shacks for summer can be added as they are required, and if experience teaches that such structures are more desirable for the housing of the patients than permanent structures, during the entire year, any number of these can be erected around the administration building.

The Sanatorium was not planned with the idea that at any future time it would be able to accommodate all the indigent consumptives in the State, there being about six thousand. It was intended as a model institution, largely educational in character, which would give a practical demonstration of up-to-date methods of treating cases of tuberculosis, and point the way for other institutions of a similar type, at the same time extending the direct benefits of its system to as large a number of cases as its necessarily limited facilities would enable it to care for. The institution expects to handle about five hundred cases annually.

While some persons believe that the institution will care for patients until they are permanently cured, that, however, is not the case. The purpose of the institution is to arrest the disease in its incipient stage and discharge the patient in such condition that, with the aid of the instruction he receives while at the institution, he may be reasonably certain of being able to effect his own cure.

This instruction will prove valuable not only to himself, but to the public in general, as it be-

comes disseminated through his agency, and that of the other patients who undergo treatment and go out again in the world at large.

Cases in the later stages will not be accepted. As a rule, the cases selected will be such as can be treated with reasonable expectancy of a cure.

There will be two prime methods in the treatment of the patients—forced feeding and fresh air. By forced feeding is meant that the patients will be obliged to take all the food and milk possible. They will be given three big meals daily, and in the forenoon and afternoon will be required to take all the eggs and milk they can swallow. All of them will be required to live out of doors practically all of the time, day and night, winter and summer.

Ample protection from the weather will be provided. It is expected that a large percentage of cures will be effected.

Editorial in *Evening News*, Oct. 25.

THE SANATORIUM OPENED.

The New Jersey Sanatorium for the Treatment of Tuberculous Diseases is at last open and ready to receive such patients as, under the law, may be admitted to its beneficent care and probable cure. Seven years have elapsed since the building of such an institution was first formally proposed, and it has taken all this time to induce successive Legislatures to appropriate the necessary funds, and for the managers and other officials to decide upon a location, purchase and improve the grounds, and erect and furnish the four buildings which are now ready for occupancy.

It was, from the beginning, a noble, humane project, conceived in the interests of suffering humanity and designed for the relief of the indigent afflicted as well as for the protection of those who were subjected to the contagious presence of the great white plague. The sanatorium at Glen Gardner, amid the rolling hills and pure air of Hunterdon County, is primarily for the treatment of consumptives who are unable to pay for medical attendance and proper food. It is the State's great effort to stamp out consumption as completely as it can be done under the latest modern methods of treatment.

Since the sanatorium became a certainty its whole plan of operation has been materially changed. The first annual report of the board of managers, in 1902, estimated that there were 5,000 cases of tuberculosis in this State; that of these at least 1,000 were indigent, 500 of which were incurable. Of those that could be benefited by treatment it was estimated that probably 250 would apply for admission, and the recommendation was that a sanatorium be built with a capacity of 250 patients.

The buildings opened to-day will not accommodate more than 105 indigent, curable patients, and therefore the plan is to make this institution a school rather than a hospital, a center of instruction, a practical object lesson in the treatment of tuberculosis in its early stages. Each patient admitted will be treated at least six months. If found to be incurable, the patient will be dismissed. If the disease yields to the fresh air and good food treatment, these patients benefited will be sent out, as soon as this can safely be done, to continue the system of cure at their homes and to instruct others how to treat the disease. In this way it is hoped the sanatorium will prove more effective in combating consumption than

if a much larger number of patients were treated there for a longer time.

Now that it is built and formally opened it is sincerely hoped that everything that can be done will be done to make it a success. It should take rank as one of the noblest institutions in this State, and, if its warfare against the spread of consumption is as effective as is hoped, it will certainly be one of the most beneficent institutions the State has ever established. If it cures a large percentage of the patients taken under its care it will prove of immense value for this alone; but as prevention is better than cure, the work of the sanatorium in removing centers of contagion will tend to check the spread of tuberculosis and thus render incalculably beneficial service to the people of this State.

Current Medical Literature.

The Physiological Effects of Gastrojejunostomy.—H. J. Paterson defends the operation of gastrojejunostomy from certain charges that have been made against it, summing up his conclusions as to its effects on the physiology of digestion substantially as follows: 1. A certain amount of bile and pancreatic juice enters the stomach after gastrojejunostomy, but the amount is small and has no bad effect. 2. The acidity of the gastric contents is markedly reduced, usually about thirty or thirty-five per cent. This is due partly to a reduction in the total amount of chlorides secreted, partly to the partial or complete neutralization of the free HCl by the alkaline bile and pancreatic juice, and probably also to earlier stimulation of the pancreatic secretion with compensatory earlier fall of the gastric secretion. In gastric ulcer cases the removal of spasmodic stenosis of the pylorus likewise tends to diminish the total acidity. 3. Gastric digestion is only impaired, not lost, after gastrojejunostomy. 4. The gastric motility if previously normal is practically unaffected. Gastrojejunostomy is therefore not a drainage operation. Its good effects in gastric ulcer are due to the reduction of the acidity of the gastric contents. 5. Gastrojejunostomy has no material effect on the metabolism of the human body, the percentage of nitrogen and fat absorbed being within the limits observed in healthy persons. This chemical fact is confirmed by the results of clinical observation.

Inflammatory Lesions of the Tubes and Pregnancy.—Louis Verdet, in *Gaz. Hebdomadaire des Sciences Médicales*, describes a case of pelvic peritonitis with salpingitis and fixed uterus in which conservative treatment resulted in removal of all the exudates and a normal pregnancy and delivery followed. It is generally held that salpingitis prevents future pregnancies, and while sterility as a rule follows, this case shows that it is not invariably present. Pregnancy is possible both in the course of and after salpingitis. Abortion may be the result; but, as in this case, normal delivery may follow. Pregnancy, when it does occur, has a favorable effect in hastening the melting away of the inflammatory tissue following the peritonitis. Hence, a conservative treatment should be used whenever possible in such cases.—*Amer. Journal of Obstetrics* (August, 1907).

The Care of the Patient During Serious Abdominal Operations.—H. B. Gardner, in the *British Medical Journal* (July 6, 1907), refers to certain points which he believes to be of value. Strychnine should be given t. i. d. for a week previous to operation. Strong purgation the night before is to be avoided, as it temporarily lowers the general blood pressure. Rest in bed should be insisted on for two or three days preceding with regulation of the diet and compliance with nursing discipline. The body should be thoroughly clothed during operation. Hot water beds are often advisable in long procedures. Thin blankets are quite inefficient as heat preservatives and all blankets should be heated. Large surfaces of the body near the wound should not be exposed or covered with wet cloths, which produce rapid chilling of the skin by cooling and evaporation, and if these are to be used mackintosh and, if possible, blanket also should lie beneath them. It must not be forgotten in this connection that exposed intestines and other vascular organs produce a rapid loss of heat and should be covered when drawn out by a succession of warm sponges or wads of gauze. A patient always begins to flag when eviscerated bowel is allowed to cool. Syncope due to the removal of the weight of fluid or tumors from the splanchnic area may be anticipated and prevented by the surgeon removing the tension slowly, and the anesthetist lowering the patient's head at the same time. After an operation conducted in either the Trendelenburg or the lithotomy position, if hemorrhage has occurred it is best not to let the patient down flat at its termination, but to keep the feet raised for some hours afterwards to prevent the supervention of cerebral anemia before the blood pressure has returned to normal level. In deep stages of anesthesia the vasomotor mechanism is paralyzed and whenever shock or hemorrhage begin to appear the anesthesia should be lightened so that the vasomotor system may recover its activity and readjust the disturbed blood pressure.

Further Researches into the Etiology of Cancer: Note Upon Certain Histological Features of Carcinomatous Tumors Revealed by an Improved Ammonio-Silver Process.—W. Ford Robertson and M. C. W. Young have made recent histological observations which are essentially a continuation of those already recorded in the *Lancet*. Distinct advances as regards the clearness of the histological pictures have been obtained by stronger silver impregnation and by the employment of various agents which practically remove either the silver deposit or the gold which has replaced it. For the removal of the silver deposit platinum bichloride has been of most service; for the removal of the gold deposit potassium cyanide has been used. A still further and very striking improvement has recently been effected by fixing the tissues with corrosive sublimate. The necessary directions for carrying out this improved ammonio-silver process are given. The general result of these new investigations has been to obtain a considerable amount of additional evidence of the occurrence of special intranuclear bodies of the nature of those previously described, to show that structures morphologically identical with the *Spirochaeta microgyrata* can be demonstrated in human carcinomata, and to confirm the previous observation of the occurrence of small nucleated bodies, evidently of ameboid character,

in such tumors. They also record some observations upon the Jensen mouse tumor, including that of the presence of a body morphologically identical with the spirochete described by Gaylor and Calkins.—*The Lancet* (Aug. 10, 1907).

Glaucoma; the Importance of Its Early Recognition.—Mary Buchanan, in the *N. Y. Med. Jour.* (Aug. 31), sketches briefly the etiology, pathology, and symptoms of glaucoma. Glaucoma is divided into two forms: (1) Primary glaucoma, coming on independently of previous inflammation or traumatism, and (2) secondary glaucoma, which follows either of these and is caused by them. The direct cause is interference with filtration. The contributing causes are many. The diagnostic points in acute glaucoma are: (1) The rapid failure of sight in that eye; (2) increase in tension; (3) the dull cornea, it looks steamy, like glass that has been breathed upon; (4) anesthesia of the cornea; (5) the semidilated and non-responsive pupil; (6) shallow anterior chamber, the iris seems to be pushed against the cornea; (7) the lids are somewhat swollen and discolored, conjunctiva injected and swollen, and there is a red, dull, ciliary injection; (8) pain in the eyeball, reflected over the brow and temple and around the lower margin of the orbit. Having diagnosed acute glaucoma, summon the nearest oculist, for a few hours' delay may mean blindness. While awaiting his arrival drop a one or two per cent. solution of eserine sulphate into the eye, repeating the dose every fifteen minutes until the pupil is pin-point. Use hot stupes all the time, give morphine hypodermically and a cathartic. An iridectomy is the treatment for acute glaucoma. Subacute glaucoma demands eserine sulphate and iridectomy, but the time for operation must be between the attacks.—*N. Y. Med. Record*.

The Nature of Herpes Simplex, with a Consideration of Its Diagnostic and Prognostic Significance in Various Infectious Diseases.—Schamberg (*Jour. of Amer. Med. Assn.*, March 2, 1907).—The author believes there are many features of resemblance between simple herpes and herpes zoster, but there are also strong points of dissimilarity. In extreme cases of herpes, particularly about the face, it is sometimes difficult to distinguish between the zoster and simple forms. The clusters of firm vesicles upon the erythematous base are identical in both. Histologically the lesions in the skin and those in the affected nerve structures are practically the same in the two varieties. Thus far, simple herpes might almost be regarded as a circumscribed, abortive zoster, but there are other differentiating clinical features. The most important is the tendency to recurrence in simple herpes, contrasted with such a rarity of second attacks in herpes zoster as almost to suggest an immunity conferred. Indeed, some attacks of true zoster are no more common than second attacks of measles or scarlet fever. Certain patients are subject to facial herpes, suffering from ten or more attacks a year. In herpes zoster, there is more pain, and the eruption follows in a general way the area of nerve distribution. In elderly patients, the neuralgia may persist for weeks or years after the disappearance of the eruption. After study of these cases, the author arrives at the following conclusions:

"1. Herpes zoster and herpes simplex—both the

facial and genital varieties—while not clinically identical, are closely related. The histology of the cutaneous lesions and the observed changes in the nerve structures examined appear in all to be practically the same.

"2. It is highly probable that the vast majority of all cases of herpes of the various types are the result of the action of a toxin. This proposition necessarily assumes the infectious origin of herpes.

"3. The frequency of herpes simplex in certain infectious diseases and its rarity in others is evidence that the toxin must possess certain peculiar qualities in order to exercise a selective affinity for sensory nerve structures.

"4. The toxins producing herpes simplex and herpes zoster are in all probability not the result of the action of any specific micro-organism. This is certainly true of the former, and by analogy may be assumed to be true of the latter disease.

"5. The three diseases in which an 'herpetogenic' toxin develops with a fair degree of constancy are pneumonia, spotted fever and malaria. Its frequency in these diseases and its comparative rarity in typhoid fever and many other infectious maladies make its appearance a symptom of considerable diagnostic import.

"6. In view of the tendency of certain individuals to recurrent attacks of facial herpes from slight indispositions, the fact of such a history should always be elicited before according to herpetic outbreaks the diagnostic value referred to."

Bodily Posture and Cardiac Physical Signs.—

William Gordon, in *The Lancet* (Aug. 10, 1907), sums up briefly by stating that in most cases the change from the erect to the recumbent position: 1. Raises and narrows the normal cardiac dullness. 2. Makes the first heart sound duller and the second sharper, thus producing the classical "lub-dup." 3. Diminishes the antero-posterior diameter of the chest. 4. Markedly narrows the dullness of an enlarged heart. 5. Increases the loudness and area of audibility of (a) "hemic murmurs" both at the base and apex; (b) mitral and tricuspid regurgitant murmurs; and (c) aortic stenotic murmurs. (Some of these murmurs may be audible only in the recumbent posture.) 6. Lessens the loudness and area of audibility of (a) the "venous hum" in the neck; and (b) the presystolic murmur of mitral stenosis. (Some of these murmurs may be audible only in the erect posture.) 7. Leaves unaffected the murmur of aortic regurgitation. 8. Increases the loudness of the accentuated pulmonary second sound. 9. Makes more marked the reduplication of the reduplicated second sound. (In some cases the reduplication is heard only in the recumbent position.) 10. Causes the partial or complete disappearance of the cardiac dullness in certain cases of cancer in their later stages.

The Unborn Child: Its Care and Its Rights.—

T. Arthur Helme, in the *British Med. Jour.* (Aug. 24), says that we must recognize the rights of the unborn child to life; to protection from the hereditary taint of degeneracy; to health—that is, to conditions conducive to the safeguarding of the health; to nature's food (when born)—that is, its mother's milk; to its natural protection (when born)—that is, its mother's care. The recognition of these rights demands the recognition of the following duties on the part of the parents, the profession, and the State: 1. On the part of the parents: A clean and normal life before and

after conception. 2. On the part of the mother: (a) The consistent regulation of her mode of life; (b) the abstention from alcohol; (c) the feeding of the child by the breast; (d) the care of the child after birth. 3. On the part of the medical profession: (a) The restriction of therapeutic feticide; (b) the education of a healthy public opinion. 4. On the part of the State: (a) Restriction of procreation to the fit, by the regulation and restriction of marriage to the fit, either by education or legislation, and by the prevention of procreation by the unfit, whether by segregation of the unfit, or sterilization of degenerates, or the evolution of a healthy public opinion; (b) by regulation of the life of the pregnant woman by State provision of food for the necessitous, by provisions of hospitals for the reception of women during pregnancy, and by State prohibition of woman's work and employment during pregnancy; (c) immediate registration of stillbirths, premature labors, abortions, and, if practicable, pregnancies; (d) registration of the life of the woman who has given birth to a child by State provision of food for the necessitous, and by State prohibition of woman's work for at least six months after confinement.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics—October, 1907.

There were 2,899 deaths reported in New Jersey during the month ending October 15, 1907. By ages there were 759 deaths among infants under one year, 308 deaths of children over one year and under five years, and 668 deaths of persons aged sixty years and over. Compared with the previous month, there was a decrease of 506 deaths from all causes. A decrease in the number of deaths also occurred from typhoid fever, measles, whooping cough, diphtheria, pulmonary tuberculosis, cerebro spinal meningitis and infantile diarrhoea. A slight increase is shown from scarlet fever and pneumonia.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending October 15, 1907, from certain selected diseases, with the averages for the previous twelve months given in parentheses:

Causes of Death.—Typhoid fever, 51 (37); measles, 3 (12); scarlet fever, 22 (17); whooping cough, 20 (26); diphtheria, 39 (58); malarial fever, 2 (2); tuberculosis of lungs, 251 (307); tuberculosis of other organs, 62 (49); cancer, 112 (119); cerebro spinal meningitis, 37 (28); diseases of nervous system, 346 (384); diseases of circulatory system, 292 (306); diseases of respiratory system (pneumonia and tuberculosis excepted), 107 (178); pneumonia, 143 (260); infantile diarrhoea, 366 (196); diseases of the digestive system (infantile diarrhoea excepted), 233 (192); Bright's disease, 180 (195); suicide, 31 (28); all other causes, 602 (574). Total, 2,899 (2,968).

Bacteriological Department—Specimens Examined.—In the bacteriological department of the State Laboratory of Hygiene there were examined during the month of October the following specimens: Diphtheria, 219; tuberculosis, 305; typhoid fever, 253; malaria, 9; miscellaneous, 9; total, 795. During the fiscal year ending October 31, 1907, there were examined: Diphtheria, 3,398;

tuberculosis, 3,402; typhoid fever, 1,975; malaria, 149; miscellaneous, 119; total, 9,043, an increase of 11.9 percent. over the number examined in 1906.

Food and Drugs.—The following examinations were made in the department of food and drugs during the month of October. The second number in parentheses is the number of specimens below the standard: Milk, 192 (20); cream, 4 (0); foods other than milk, 94 (2); drugs, 13 (42); kerosene, 27 (0); water, 78. During the year ending October 31, 1907, the following examinations were made: Milk, 2,167 (508); cream, 150 (13); foods other than milk, 592 (175); drugs, 204 (367); kerosene, 63 (6); water, 549; an increase of 12.7 per cent. over the number examined in 1906.

EXAMINATION FOR LICENSES TO PRACTICE MEDICINE.

Report of the New Jersey State Board of Medical Examiners.

Report of examination held at Trenton, N. J., October 15 and 16, 1907. Number of subjects examined in, 9; total number of questions, 90; percentage required to pass, 75. Written examination. Total number examined, 28; number passed, 20; number failed, 8.

- *Baltimore Medical College, †1907, ‡83.6.
- *Cornell University, †1907, ‡88.4.
- *Baltimore Medical College, †1906, ‡75.1.
- *Howard University, Med. Dept., †1907, ‡79.2.
- *Women's Medical College, †1906, ‡80.1.
- *Johns Hopkins University, †1907, ‡88.6.
- *Jefferson Medical College, †1907, ‡81.9.
- *Baltimore Medical College, †1906, ‡75.4.
- *Howard University, Med. Dept., †1907, ‡77.
- *University of Pennsylvania, †1885, ‡81.
- *University of Pennsylvania, †1905, ‡85.4.
- *Johns Hopkins University, †1906, ‡79.5.
- *University of Pennsylvania, †1907, ‡80.2.
- *University of Pennsylvania, †1907, ‡79.5.
- *College of P. and S., Baltimore, †1906, ‡81.4.
- *University of Maryland, †1904, ‡78.4.
- *University of Vermont, †1907, ‡80.2.
- *Woman's Medical College, †1889, ‡75.
- *University of Louisville, †1906, ‡77.8.
- *College of P. and S., N. Y. City, †1896, ‡76.4.
- *Maryland Medical College, †1907, ‡69.
- *Baltimore Medical College, †1907, ‡73.8.
- *University of Bologna, †1905, ‡73.2.
- *University of Naples, †1906, ‡69.9.
- *University of Naples, †1907, ‡70.2.
- *Baltimore Medical College, †1907, ‡72.
- *Baltimore University, †1904, ‡68.8.
- *University of Turin, †1905, ‡72.4.

The following have successfully passed:

Eugene J. Leppold and Jacob Roemer, Paterson; Samuel A. Cosgrove, Wm. W. Nelson and Seth B. Sprague, Jersey City; Edgar K. Wells, Pemberton; Chas. W. Naulty, Jr., Perth Amboy; Samuel T. Hubbard, Hackensack; George B. Hickok, East Orange; Ruth Clement, National Park; Lester R. Davis and Royden W. Davison, Trenton; Lella Ridont, Brooklyn, N. Y.; Chester T. Brown, Francis Crudden, George F. Lemke and Nannie Lee Winn, New York City; Fred-eric M. Strouse, Philadelphia, Pa.; Daniel S. T. Jenifer, Rock Raven, Md.; James F. Lawson, Washington, D. C.

* School of graduation. † Year of graduation. ‡ Per cent.

Personal

Dr. Alex. Marcy, Jr., of Riverton, has associated with him **Dr. Peter Boysen**, formerly of Philadelphia, who has established a fully equipped laboratory for the examination of pathological specimens, &c. Dr. Boysen has become a member of the Burlington County Medical Society. **Dr. Frederick C. Burt**, of Hammon, has been elected a member of the American Medical Association.

The following cities and towns have elected physicians as mayors: Atlantic Highlands, **Dr. John H. Van Mater**; Frenchtown, **Dr. F. H. Decker**; Paterson, **Dr. Andrew F. McBride**; Pleasantville, **Dr. J. Sooy**; Rahway, **Dr. Charles B. Holmes**; Summit, **Dr. J. Boyd Risk**; Swedesboro, **Dr. Vernon E. DeGroot**; Trenton, **Dr. Walter Madden**; Washington, **Dr. Charles B. Smith**.

Death

STEPHENS.—At Addison, N. Y., on November 22d, of locomotor ataxia, Dr. David Stephens, of New Brunswick, N. J. He graduated at the Berkshire Medical College, Massachusetts, 1863. He was a druggist and also practised medicine for about forty years in New Brunswick. Served the Middlesex County Medical Society faithfully as Secretary about twenty years. Since 1893 has been a permanent delegate from Middlesex County to the Medical Society of New Jersey.

Book Reviews.

THE INTERNAL SECRETIONS AND THE PRINCIPLES OF MEDICINE. By Prof. Charles E. deM. Sajous, M. D., Fellow of the College of Physicians of Philadelphia; Knight of the Legion of Honor and Officer of the Academy of France; Knight of the Order of Leopold of Belgium, etc. Volume second, with twenty-five illustrations; pp. 1873. Philadelphia. F. A. Davis Company, Publishers. 1907.

Dr. Sajous for many years has given patient study to many of the problems which physiology has failed to solve, especially those of respiration, tissue metabolism and nutrition and the manner in which function is incited in an organ, and the result has been a most valuable contribution to our knowledge of disease and its treatment. The crowning feature of his work is the discovery of the process through which the body antagonizes disease by providing the blood with what he has termed its "auto-antitoxin." The doctor is not a therapeutic nihilist. We were especially interested in his chapter on pneumonia, which Dr. Osler regards as a "self-limited disease," in which Dr. Sajous presents strong evidence in attestation of the fact that pneumonia can be checked by remedies which enhance the body's auto-protective functions. In the introduction to this volume the doctor says: "I shall be amply rewarded if I have succeeded in proving this fact that if 'Internal Secretions' to any degree instils into its readers the unbounded confidence in the power of our remedies to antagonize and even master disease that a broad survey of the scientific facts at our disposal and considerable practical experience have instilled in me." We commend this volume to the profession.

DISEASES OF THE NERVOUS SYSTEM. Edited by Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence, Northwestern University, Medical Department, Chicago, Ill. An authorized translation from "Die Deutsche Klinik," under the editorial supervision of Prof. Julius L. Salinger, M. D. With 195 illustrations in the text and five colored plates; cloth pp. 1205; price, \$7.00 net. D. Appleton & Co., New York and London. 1908.

This volume of the "Modern Clinical Series" is fully equal to any that have preceded it. The various diseases of which it treats are presented in a very able and practical manner. Each disease is treated by a specialist of recognized ability who has had extensive experience in its study and treatment and gives us the latest results of scientific investigation, and, more fully than usual, the indications and value of therapeutics. As the American editor, in the preface to this volume, says: "One is struck throughout the book with the fact that while Germany is supposed to be the land of therapeutic nihilism these various authors have found therapeutics of real help and afford the reader the benefit of their experience and judgment in this important branch of practice." The book is worthy a place in every physician's library.

PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL ON PHARMACY AND CHEMISTRY.

(Continued.)

OXAPHOR.

Oxaphor is a 50 per cent. solution of oxycamphor.

$$\begin{array}{c} \text{C}_8\text{H}_{14} \\ \text{CHOH} \\ \text{CO} \end{array} = \text{C}_{10}\text{H}_{16}\text{O}_2, \text{ a derivative of camphor in which a hydrogen atom has been replaced by a hydroxyl group.}$$

Actions and Uses.—Oxaphor is a depressant to the respiratory center, but is said to have no effect on circulation and secretion. It is recommended as a substitute for morphine in respiratory disorders, chiefly in cardiac dyspnea and asthma. It is said to have been used with advantage in renal affections, in emphysema, bronchitis, etc. Freedom from undesirable side-effects is claimed as an advantage over morphine. Dosage.—2 to 3 Gm. (30 to 45 grains) of oxaphor in a little water, wine, syrup or other desirable adjuvant. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Höchst a. M. (Victor Koechl & Co., New York).

PHENACETIN.

A name applied to Acetphenetidinum, U. S. P. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

PHENOCOLL HYDROCHLORIDE.

Phenocoll hydrochloride, $\text{C}_6\text{H}_4.\text{OC}_2\text{H}_5.\text{NH}(\text{CH}_2.\text{NH}_2.\text{CO})\text{HCl} = \text{C}_{16}\text{H}_{18}\text{O}_2\text{N}_2\text{HCl}$, is the hydrochloride of a synthetic base produced by the combination of phenetidin (paraamidophenetol) and glycocoll (amidoacetic acid). Phenocoll, $\text{C}_6\text{H}_4.\text{OC}_2\text{H}_5.\text{NH}(\text{CH}_2.\text{NH}_2.\text{CO})$, differs from acetphenetidin (phenacetin), $\text{C}_6\text{H}_4.\text{OC}_2\text{H}_5.\text{NH}(\text{CH}_3.\text{CO})$, only in that one hydrogen atom in the acetyl group has been replaced by the NH_2 group.

Actions and Uses.—Phenocoll hydrochloride is similar to acetphenetidin (phenacetin) in its effects and acts as an antineuralgic and antipyretic. It is claimed by some observers to be less depressing than other coal tar antipyretics and is said to be prompt in its antipyretic action. It has been asserted to have an antiperiodic action and to be efficient as a substitute for quinine in malaria and free from unpleasant by-effects. In somewhat larger doses than are usually employed it is said to have a beneficial action in rheumatic fever. Dosage.—0.3 to 1.3 Gm (5 to 20 grains) in powder, dissolved in water before taking; hypodermically, in 0.25 to 0.5 Gm. (4 to 8 grains) doses. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

PHENOCOLL SALICYLATE.

Phenocoll salicylate, $\text{C}_6\text{H}_4.\text{OC}_2\text{H}_5.\text{NH}(\text{CH}_2.\text{NH}_2.\text{CO}).\text{C}_6\text{H}_4.\text{OH}.\text{COOH} = \text{C}_{17}\text{H}_{20}\text{O}_5\text{N}_2$, is the salicylate of the synthetic base phenocoll (see phenocoll hydrochloride).

Actions and Uses.—It combines the therapeutic action of phenocoll (antipyretic, analgesic, see phenocoll hydrochloride) with those of salicylic acid (antiseptic, antirheumatic). It is recommended in rheumatism, gout, chorea, pleuritis and fevers, especially in influenza. Dosage.—1 to 2 Gm. (15 to 30 grains).

PEGNIN.

The milk-curdling enzyme of calf's rennet, diluted with sugar of milk and sodium chloride.

Actions and Uses.—Producing a finely divided coagulum, it obviates the formation of the clotty curds which are liable to be produced when untreated cow's milk is taken as food. Cow's milk coagulated with peginn as described below is said to be particularly serviceable for infant feeding and well adapted as a food for adults in stomach affections and in disturbances of the digestion incident to infectious diseases, in hyperacidity, etc. Dosage.—8 to 10 Gm. (120 to 150 grains) of peginn are required for 1 liter (34 fluidounces) of milk, previously boiled and cooled to about 40° C. (104° F.). The mixture, after a brief shaking, is allowed to stand 2 to 3 minutes or until it is completely coagulated, and then shaken vigorously during several minutes until the coagulum has been converted into a smooth, homogeneous mixture, and set aside in a cool place. It is transferred to the nursing bottle as required and heated in warm water to the body temperature (37.5° C., 99.5° F.) before feeding infants. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Höchst a. M. (Victor Koechl & Co., New York).

The distressing thirst after abdominal operations, where fluid by mouth produces vomiting, is best relieved by subcutaneous infusions of normal salt solutions; or by the insertion of a tube into the rectum connected with a bag of saline solution placed just above the level of the patient's hips, allowing the injection of water drop by drop and so slowly that no irritation of the rectum is set up. The patient may in this manner receive small quantities of water for hours.

Before deciding on the necessity for a laparotomy for some vague abdominal condition, where distention is present, empty the bladder. In many cases the acute abdominal distress will disappear.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 7.

ORANGE, N. J., JANUARY, 1908.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

SYMPOSIUM ON THE ERUPTIVE DISEASES.

At the 141st Annual Meeting of the Medical Society of New Jersey, June, 1907.

FIRST PAPER.

Scarlet Fever.

By Hiram Williams, M. D.
Passaic, N. J.

Scarlet fever has been recognized as a disease in itself for about three hundred and fifty years, and we find little record of it before the sixteenth century. Previous to that time and during the period between the sixteenth and seventeenth centuries it was confused with measles and smallpox. Sydenham was one of the first to consider it a separate disease. Brettoneau, another eminent physician, studied it carefully and relates his experience with both the mild and malignant form.

It is now acknowledged to be one of the most fatal diseases of childhood. In our large communities it is always present, and we meet it in its epidemic form when we least expect it.

The season apparently does not influence its presence, although carefully compiled statistics show about three times as many cases during the first six months of the year as during the last six months. The number of cases increases steadily from September first to the middle of May. From that time to the opening of school in Sep-

tember there are comparatively few cases. Most of the patients are among school children. Can we, then, not safely conclude that it is spread through the schools as the association among children is always more intimate during the school year than at other times?

Diagnosis.—Its onset presents no pathognomonic sign—unlike most of the exanthemata. The eruption is not unlike other skin eruptions. It may occur in conditions having nothing in common etiologically. We may say the same of the pulse and temperature. But adding these three factors, remembering the order of these changes, and scarlet fever is often easily diagnosed at the first visit, if seen on the second, third or fourth day and a history of the onset is provided. This is the rule to which, of course, there are exceptions.

INCUBATION. The period of incubation is rarely longer than four days and the primary symptoms are due to the action of the poison upon the mucous membranes. The initial symptom is generally vomiting. It may be solely nausea with slight headache and malaise or vomiting unexpected and without retching, or, in small children, convulsions. Gastric symptoms are more sympathetic than otherwise, for it is not progressive and its effects may soon pass away. This symptom may be absent. To be of value in diagnosis this symptom must be initial. Sore throat follows and is always present and becomes worse for two or three days. The throat conditions may be so mild as to hardly attract attention. It is rarely so mild as this, yet in the mildest case a change in the color of the mucous membrane may be observed, and the change

will persist and continue up to the appearance of the eruption on the skin. It begins as a tonsilitis and becomes a pharyngitis. Follicular deposits may be seen in a few hours. The mucous membrane is bright red and there may be swelling. The inflammation progresses to the fauces with margin more distinct than in other conditions.

Irrespective of throat conditions a diagnosis of scarlet fever cannot be made previous to desquamation and the presence of complications. The throat condition alone cannot be the basis of such a diagnosis. In making this assertion we have in mind the inflamed and sometimes painful sore throats which attack attendants on scarlet fever patients. These produce no complications other than those which follow non-scarlatinal throats and are not followed by desquamation.

Just as the initial sore throat and temperature constitute a *sine qua non*, so the subsequent skin eruption is a necessity before a positive diagnosis is possible. This confirmatory lesion appears not sooner than twenty-four nor later than forty-eight hours after the onset of the tonsilitis. In character the eruption is the same on mucous membrane and skin. It is an inflammation going on to exudation, the exudate appearing in the form of closely set pin-point vesicles each with peripheral erythema. The initial erythema quickly coalesces, making the redness diffuse. The eruption first shows about the neck, the trunk and limbs progressing downward. The cheeks may be markedly flushed. As the flush does not affect the lips, chin and forehead, there is sometimes a characteristic facies. It must be remembered that red-haired children may present at all times a scarlatinal appearance about the neck and trunk, and that crying and struggling in children often produce an appearance simulating scarlet fever.

The tongue may be unaffected, it may indicate a febrile condition only, or it may indicate unmistakable scarlet fever. In such a case it is moist, white down the center, clean and bright red at tip and edges with enlarged bright papille over all. The strawberry tongue appears a day or two later than the eruption.

The onset of scarlet fever is invariably accompanied with a rise in temperature. In favorable cases the maximum is on the third and fourth day. It declines to normal in about the same length of time. There are morning remissions and the fever de-

clines as the eruption comes out. The lateral post-cervical, axillary and inguinal glands are slightly enlarged at the onset.

Among the conditions most often met with and simulating scarlet fever is German measles. The eruption in this malady comes to its maximum and disappears in about one-half the time that these changes occur in scarlet fever. The throat lesion temperature and clinical condition do not match the eruption in scarlatinal proportion.

Treatment. The treatment may be divided into prophylactic and medicinal. Under the first division we have the early notification of cases, isolation, and possibly removal to the hospital if the community in which we live affords one and the case cannot be isolated at home. The proper isolation of cases of this malady in tenement houses is impossible. In detached houses and where a competent nurse is available the patient may remain at home. Doubtful cases should be isolated at once and there observed until a diagnosis may be made. After the case has ended a thorough disinfection of the patient and the premises should be insisted upon.

Medical Scarlet Fever exhibits the greatest variety in the degree of the toxæmia. Many mild cases require nothing beyond isolation, light diet, daily ablutions and avoidance of chill. Nourish the patient. The diet should be fluid and the excretions and secretions should be carefully watched. Gentle diuretics and laxatives may be given.

The urine should be examined daily and the amount voided noted. If albumin is found look for casts. Blood is often voided in quantities large enough to be seen with the naked eye. A milk diet and sudorifics may help at this time. Adrenalin has been used and is highly vaunted. Three or four drops of a 1-100 solution every two or three hours is generally ample.

The naso-pharynx should receive attention. A normal saline solution may be used for nose and throat. A pint of warm water and about three-fourths of a teaspoonful of common table salt with a soft rubber syringe are all that is necessary. The solution is slowly injected, the child lying on its side, and if proper precautions are taken there need not be any fear of the fluid going through the eustachian tube and causing an otitis. A rise in temperature accompanies any inflammation in the ear. Should this occur prompt local treatment must be resorted to. Wash out the ear with an antiseptic, and if necessary a paracentesis

should be performed at once. Suppurating glands may be operated upon, but if supuration does not occur the swelling goes away as recovery progresses.

The question of baths in scarlet fever has provoked much discussion, but it seems to be well established that a cold bath will allay restlessness and cause a fall in temperature. If the rectal temperature is 104 a bath of 68 or 70 should be given of brief duration, after which the patient should be thoroughly dried before returning to bed. It has been claimed that cold baths cause nephritis, but Litchenstein flatly contradicts this as false, and, on the contrary, claims that the use of cold baths diminishes the tendency to nephritis.

Complications in scarlet fever cause most trouble. Every practitioner can bring to his recollection cases where the throat has been so choked that the child was unable to swallow, where the cervical glands were greatly enlarged, where the child had a nephritis or an otitis. It has been established by the bacteriologists that if scarlet fever is not due to streptococci its complications are. Streptococci have been found in the urine, in the throat and nasal discharges, and also in the discharge from the ear.

Baginsky states that "it is difficult after my experience to recede entirely from the position that scarlatina is due to the streptococcus, and that the latter by no means represents a secondary infection following in the wake of some other germ disease." Huebner, before the Berlin Medical Society, admitted the constant presence of streptococci, but was not satisfied with the results of animal experiment. Wasserman supports Baginsky.

Reasoning by analogy, therefore, the proper remedy to use would be anti-streptococcus serum, but the results obtained from it have been conflicting both in Europe and this country. Moser's has given the best results and is given in doses of 100 to 200 C. C. Von Eserich reports excellent results, especially in those cases which presented symptoms of the most profound type and which indicated before injection a fatal termination. Bearing these results in mind, I have used it with a very favorable result in six cases. All were injected early and all presented symptoms of a severe type. No complications followed in any of these cases, and I hope at some later day to give the details of these and other cases that I have seen and which have been treated in this manner.

In some cases of scarlet fever, in spite of

all our care, the child will have nephritis. Giving the patient much warm water to drink, warm baths, sudorifics and increasing the activity of the skin will take much of the burden from the kidneys and tend to prevent this most lamentable of complications. Diuretics cannot be depended on. Digitalis in the form of the infusion will sometimes be effective. Water in generous quantities is at times of more use than any of the medicinal agents used in treating nephritis.

SECOND PAPER.

Measles.

By Philip Marvel, M. D., Atlantic City.

When discussing the acute contagious, eruptive fevers, one is at once confronted with the fact that they compose a group of diseases in which the germs or poisons propagate within the human body, and of which our knowledge is as yet very indefinite and incomplete. Clinical methods that obtain in the investigation of other diseases, by which pathological microbes are easily demonstrated, fail, when applied to the study of the cause and environment of acute epidemic exanthemata. Therefore, as yet we are without reliable information concerning detailed knowledge of the specific agents active in their production. Whilst painstaking laboratory research has thus far failed to isolate the microbic organisms supposed to exist, and under favorable conditions to produce these fevers, the failure cannot be accepted as an argument in any wise proving the absence of such organism, nor as evidence discrediting the possibility of an early discovery of a bacterial cause. The "contagium vivum" is as likely to be present in these diseases as in any other infection, and we may well hope, even expect, ere long, through improved and advanced methods in scientific research, to discover the specific bacteria of these diseases, as have been found in diphtheria, pneumonia, erysipelas, etc. But certain truths which apply to the acute exanthemata have already been established, and so definitely so that they no longer admit of question. The contagion or toxins of the acute eruptive fevers are readily transmitted by contact from one individual to another, and through atmospheric agencies. Observation has taught us that nearly all persons are susceptible, few are immune, and in the majority of cases one attack of

either of the eruptive diseases protects against subsequent infection by the same disease, but it does not protect or make one immune to either of the others. These observations, lightly considered, would seem to answer all query as to whether there is only a single primary cause for all the acute contagious fevers. It is true, however, that internal environment may modify any individual's physical and physio-chemical forces in a manner quite disturbing to the metabolism, yet in no way interfere with the conditions requisite to propagation, growth and distribution of harmless bacteria under normal conditions, but if present for a long time we are led to pre-suppose that a change of these to pathogenic bacteria, under abnormal conditions, may give rise to a variety of manifestations, some of which are not at all understood. Therefore, when considered from this latter point of view, recognizing the similarity of symptoms, eruptions and irregularities, in a measure common to all, we must admit the existence of reasonable basis for a just difference of opinion; but interesting and seductive as is this division of the subject, the brief time allotted for this discussion prevents my following the thought further, and in discussing the single topic assigned me, viz., Measles, it will be my purpose, after referring very briefly to the history and principle differential diagnosis from other eruptive diseases, to offer a few suggestions concerning certain phases of this and other eruptive diseases under discussion, which I feel have not received consideration by the majority of the authorities commensurate with their importance in the control and prophylactic treatment of the same.

Holt has defined measles as "an epidemic, contagious fever more widely prevalent than any other eruptive fever; having a period of incubation from eleven to fourteen days and an invasion of three or four days, characterized by a maculo-papular eruption, appearing first on the face and spreading slowly over the trunk and arms, and then to the lower limbs, disappearing in from four to six days, followed by desquamation, which usually is completed in a week or ten days. Mortality low, except in infants and delicate children." Welch and Schamberg describe the disease as "an acute, contagious, febrile disorder, having an incubation stage in the majority of cases of about ten days, characterized by catarrhal symptoms, affecting the upper respiratory tract, and accompanied by an eruption of dusky

red, slightly elevated macules, occurring commonly in epidemics, being the most contagious of the various exanthemateous affections." The slight difference in the descriptive phraseology of the disease by the foregoing authors counts for little if studied from the standpoint of anatomical distribution of the eruption, and the disturbed physiological forces accompanying the disease.

Referring to measles, I have been unable to find any definite data fixing the time when the disease was first observed. We know, however, that its origin antedates its early description, and that it was for some centuries previous to the seventeenth confounded with, and described as scarlatina. In fact, it was not until some time in the latter part of the eighteenth century that scarlet fever and measles were recognized as separate and distinct diseases, and so described and treated. The origin of measles is buried in obscurity. Its distribution is almost world-wide, only the most remote parts of the earth have remained exempt from its ravages. It appeared in America soon after the arrival of the first settlers, and advanced steadily with the pioneer civilization, reaching Oregon in 1829, California and Hudson Bay territory in 1846. Since a general and full description of the disease and its special treatment may be read in any one of the various textbooks, with these references and a few words on its differentiation from those diseases with which it is most likely to be confounded, I shall further discuss the subject from the standpoint indicated in the beginning of my paper. For the sake of division and ease of comprehension, I will divide the contagious, eruptive diseases into two classes, namely, (A) those having a papular, a vesicular and a papulo-vesicular eruption; and (B) those having a macular, a maculo-papular, a maculo-vesicular, a maculo-punctate, and an efflorescent eruption. There may also occur two distinctive eruptions at the same time, but in such event the diseases present would have to be studied from the standpoint of each independently. I therefore leave this complexity of manifestations with this reference.

In differentiating measles from the first series referred to, viz., those having eruptions under class (A), there would arise few or no questions except with Rötheln or German measles. However, in the latter series, those represented in class (B), there will be met cases where differentiation within the first twenty-four or forty-eight hours

will be impossible, and the final decision, in some of these, will depend upon the course which the disease subsequently follows. In typical cases of measles, there will be little doubt in the diagnosis. The combination of fever, macular eruption beginning on the face and extending to the trunk and arms and thence to the limbs, accompanied by a catarrhal inflammation of the upper respiratory mucous surfaces, affords a characteristic and easily recognized picture, particularly if considered with the history and course of the malady. In the very early stage, or first day of the invasion, the disease may be mistaken for simple coryza, or bronchial catarrh. Should the latter condition persist for four or more days without eruption, though there are exceptions, it may usually be safe to assume that the illness is not measles. In such a case the discovery of Koplik's Spots may settle the diagnosis. These spots are the one pathognomonic sign of measles, and, although often difficult to find, are present in about 90 per cent. of the cases. They are present one to four days before the eruption and lapse their distinctive features about the time the rash becomes marked. They are often gone before the physician is called, but their recognition establishes the diagnosis, while their chief value will probably be in the prevention of its spread by making possible early recognition and segregation among those known to have been exposed. Then the most likely diseases and disturbances with which measles may be confounded are Rötheln, scarlatina, Duke's disease, typhus fever, erythema-scarlatinoides, sepsis, and certain drug rashes, such as follow the administration of belladonna, quinine, capaiba and a few of the cold tar preparations. Upon the history, period of the invasion, character and distribution of the rash and its subsequent behavior, together with the marked glandular involvement in scarlatina and in sepsis, where the distribution will be more general contrasted with the slight involvement sometimes seen in measles and in Rötheln, and almost never, except with intercurring troubles, in the early stages of typhus fever, erythema-scarlatinoides, nor in the drug rashes.

The latter rashes are usually characterized by a uniform, instead of a puncta-form efflorescence, a longer period of invasion, tendency to recur and an absence of throat involvement; with the additional history of the ingestion of drugs, transitory invasion, non-febrile state and no special train of

symptoms. But in every epidemic there necessarily will be doubtful cases, which cannot be cleared up except by careful and continued observation, and even in a few cases a clinical study of the excretions, or the subsequent behavior of the infection in other members of the family will be required for positive and indisputable data. What has been said of drug rashes is largely true of indigestion rashes, with the exception, of course, of the ingestion of the drug. With Duke's disease, for the present at least, our knowledge does not warrant any special division or specific recommendation.

Whilst Hebra denies the possibility of the simultaneous presence of two of the exanthemata, other writers, as Thomas, Black, Steiner, Monte, and Kober, make positive assertions to the contrary. The former states that measles may appear during the course of variola, scarlet fever and varicella, and vice versa. Black, Steiner, Monte, Kober, all report observations of simultaneous existence of measles with other eruptive fevers. Also one must not forget the possibility of an abnormal course of any one of the eruptive diseases. Erythematous, papulo-vesicular, and pustular lesions may accompany any of these diseases and lead to error in diagnosis. Among the sequellae of measles, the following should be remembered: More or less severe chronic conjunctivitis with or without obstinate blephoritis, keratitis, and even keratomalaria and other alterations in the orbit may occasionally be observed. More frequently, however, a catarrhal inflammation of the middle and external ear, with a persistent otorrhoea and subsequent deafness. Catarrhal, aphthous and gangrenous stomatitis, chronic pharyngeal, laryngeal and bronchial inflammations. The latter two are perhaps the most common of all. Bronchial pneumonia may develop during the attack or occur subsequent to it. Acute miliary tuberculosis being present, preceding an attack of measles, may pursue a rapidly fatal course. But for the accompanying or resulting catarrhal and croupous pneumonias, and pulmonary phthisis, measles would in no wise be so formidable a disease.

In order that we may avoid the greater number of sequellae to which reference is made above, and the spread of the infection, we must lessen the number of epidemics and limit the number of individuals attacked. Therefore, too much stress cannot be laid upon the four distinctive prohibitive features in the treatment and manage-

ment of measles, which I especially desire to emphasize and make the feature of this paper; and a careful study and strict enforcement of the same will relieve us in the main of much anxiety and inconvenience, as well as protect the public from unnecessary disease. The features referred to are: (1) isolation; (2) special education; (3) provisional care of the afflicted indigent poor; (4) thorough disinfection. It would seem obvious to the most of us, if we are to control or exercise a particular restraint upon the wilful or accidental spread of this or other contagion, that the initial or primary cases will need to be put under positive control, and those who have been exposed by contact or otherwise with the disease should be educated to place themselves willingly under supervision, and when necessary, isolation, thus enabling the physician to control the patient when the first evidence of the disease is manifest.

Special education of the nurse who is in charge of the patient, and of the family, so that they may maintain an intelligent co-operation with both physician and nurse; giving to both of them some knowledge of the etiology, the course and contagiousness of the disease; the dangers arising therefrom and the necessity for intelligent and willing assistance from all interested. These necessarily are matters of as great importance to members of the family not immune, and to the community of families at large, as to the individual or patient afflicted. With the more intelligent patients there will be little or no question, nor opposition to the management planned along these lines, and the result with them, unless complicated with other diseases, or influenced by circumstances beyond the physicians' control, will be most gratifying. However, for a time at least, there will be serious, if not sad, problems to be met in the management of the average uneducated American and foreign-born citizen, when afflicted with contagious disease, that will tax the efforts and ingenuity of the most capable to solve. Therefore, it will be with this latter class, and with those referred to as the "indigent poor," with whom we will meet the greatest difficulties in the problems of education and control; and with whom we must labor most and hardest; at one and the same time protecting them from the disease and enlightening them upon the subject of how to prevent the spread of the contagion, thus avoiding further distribution of the disease. At the present time there are few of our larger

cities, or of our State or county boards of health, that seem to have seriously considered the question of proper control of contagious diseases, and the latter, it seems to me, have been derelict of a most pressing duty where they have been negligent of their opportunities to further the education of the people in the necessity for the inspection of schools, both private and public, in failing to present the matter of the need of greater protection to the public more forcibly to the Legislature, and in not having insisted upon the importance and value of contagious hospitals, where complete isolation and control of this and other contagious diseases can be had. As difficult as it may seem to obtain, isolation is of prime importance in the control and treatment of all contagious diseases; and this, with proper ventilation, control of communication, thorough disinfection of the general excreta and of the secretions from the skin and mouth, and as well the apartments occupied by the patient, embody the more important features concerning the individual and the public in the treatment of both sporadic and epidemic cases. A lack of attention to these features, by either physician or nurse, should be considered little less than gross negligence, and should bring deserved censure upon them, or either of them, for the unfaithful and incomplete discharge of their duty.

In a campaign conducted for the purpose of educating the public against the spread of contagious disease, too much importance cannot be placed upon the careful guarding of all schools, viz., kindergartens, private, public and Sunday schools, and emphasis should be placed upon the proper daily inspection of the same. Indeed, all congregations where children are brought together in numbers, where the rooms are too often illy ventilated, should have thoughtful and intelligent consideration. With the present slight or inadequate provisions made, and in many instances with no provisions, the proper treatment cannot be given those ill, who have been unfortunate in life and who are compelled to live in neglect and squalor, and will not be given them until municipalities provide properly arranged contagious disease hospitals for their detention and care, but this being done, and the other features referred to having received the attention they merit, the further treatment of measles and other exanthemata as well, will very soon resolve itself into the requirement of only an occasional administration

of an alkaline febrifuge with a saline eliminant; and when the foregoing suggestions shall have received the thoughtful consideration the cause deserves from the physician, the nurse, the legislator, the school boards, the health boards, the family, the municipal officials, and the community interested, for a twelve months, epidemics of measles and epidemics of other contagious diseases will cease to exist, individuals and communities will be protected, diseases prevented, and mortality greatly lessened.

THIRD PAPER.

Rötheln.

By Alexander McAlister, M. D.,
Camden, N. J.

The literature of Rötheln presents nothing either new or striking. The fact that a few prominent writers still stoutly deny the existence of such a disease is interesting. These form a small minority whose contentions the majority claims argues only that they have yet to witness their initial epidemic of German measles.

Among American writers none has made a more thorough study of Rötheln than Griffith, of Philadelphia. This author, with the majority of writers on infantile diseases, contends that in order to differentiate the infection easily a physician must of necessity have studied it in a characteristic epidemic.

Since Rötheln is invariably milder than scarlatina, and generally of even less consequence than a mild type of morbilli, while it demands the same general treatment as equally mild cases of both the other diseases, the question of paramount importance is that of diagnosis. This fact is properly appreciated only when we remember that the diagnosis of Rötheln is seldom easy and sometimes quite impossible. The latter applies particularly to institutions where the infection may occur side by side with cases of ordinary measles or of scarlet fever. Here, too, the attacks are less likely to be mild and more apt to share the milder complications frequently observed in the other two named diseases.

The term Rötheln is simply the German name for measles. The best known of the many synonyms are Rubella, Rubeola Notha, Epidemic Roseola, Rose Rash, Hybrid Measles, Hybrid Scarlatina, German Measles, French Measles, etc. Rötheln is an acute, contagious exanthem, closely resem-

bling morbilli in its cutaneous manifestations and scarlatina in its throat symptoms. In its preponderance of mild cases Rötheln is most like morbilli, while in its mode of appearing and manner of spreading it closely resembles both measles and scarlet fever.

Formerly the infection was always confounded with one or the other of the last named exanthems. In the earliest differentiations the new infection was regarded simply as a hybrid—now of morbilli, then of scarlatina, according to the predominant feature of the particular epidemic. The most formidable obstacle in the way of adopting this classification was the law of immunity governing the so-called hybrid, and which was found to be entirely distinct from those of the other two infections.

Rötheln spreads freely among persons who have already had morbilli or scarlatina as among those who have not had one of these diseases. Likewise an attack of Rötheln does not afford protection against an attack of measles or scarlet fever. On the other hand, Rötheln protects against itself. These are valuable diagnostic facts. No reliable diagnosis can be made from the observation of a single case, or even of a few isolated cases. Upon close investigation Rötheln is found not to have a single distinctive feature apart from the particular epidemic considered as a unit. Yet when so studied we find no exanthem of this class which is more distinctive than German measles.

The most conspicuous symptom and the one feature of Rötheln which is invariably present is the rose rash, yet it is difficult to describe the eruption in definite terms. A diffuse rose rash, without the crescentic arrangement, with intervening healthy skin and no marked tendency to desquamation, when attended by little or no elevation of temperature, is probably Rötheln, especially if occurring epidemically. Among the newest helps in diagnosis may be mentioned the presence or absence of "the Koplik Spots." It is not known that these even appear in Rötheln, while, on the other hand, they are probably never absent in morbilli.

The safest rule to follow in the diagnosis of Rötheln is to observe the leading features of as large a group of allied cases as possible. Then make comparisons with the classical features of the exanthem they chance most closely to resemble. In cases demanding the largest measure of individual study resort must be had to processes of elimination. This will be given somewhat in detail below.

Rötheln differs from morbilli in these leading particulars: The eruption appears earlier, is of a more florid hue, shows a tendency to crescentic arrangement and the individual papules are smaller than in morbilli. Catarrhal symptoms, if present at all, are always milder than in morbilli.

Rötheln is unlike scarlatina in these main features: The rapid pulse, the "strawberry tongue," the marked fever, and the grave complications, so characteristic of scarlatina, are never present in Rötheln. The rash is more nearly that of morbilli and generally persists longer than in either morbilli or scarlatina. As a rule the rash is the first symptom of Rötheln observed by the mother.

In early and apparently isolated cases the following patent facts will aid, by elimination, in the question of diagnosis: Elevation and decline of the temperature incidental to the spreading and fading of the rash, however slight the former, points certainly to scarlet fever. An extensive eruption without disturbance of the temperature or considerable desquamation, is not scarlet fever. A profuse rose rash without considerable catarrhal or febrile phenomena is probably not morbilli.

FOURTH PAPER.

Smallpox.

By Edward E. Worl, M. D.,
Newark, N. J.

Renewed interest has been taken in the study of infectious diseases. This study is along the line of the blood and its defences. There is hope in this direction that we shall be able to determine the personal equation of the individual to determine his liability or power of resistance. The classical descriptions of smallpox by Sydenham and his successors remain practically unchanged. The great classes of this disease, namely, hemorrhagic, confluent and discrete. These may be more or less subdivided, but we can only touch on a few points of so great a subject, so we begin by its definition.

Smallpox—"An acute infectious disease characterized by an initial fever of about three days, followed by an eruption which passes through the stages of papule vesicle and pustule, ending in incrustation, leaving pits or scars; the fever either intermitting or remitting in the papular stage and in-

creasing in the pustular stage."—Welch and Schamberg.

Smallpox is a disease of historic memories—it is the typical contagious disease, preserving its identity practically unchanged through all the centuries. It is to-day shorn of many of its old terrors, and yet it has a tendency to return to its old mortality whenever we in our turn neglect vaccination and the lessons dearly learned by our ancestors. So I would define smallpox to you to-day as a disease belonging to and peculiar to "unvaccinated people," but there are two classes of the unvaccinated: First, those who have never in their lives been vaccinated; and, second, those having been vaccinated who have allowed sufficient time to elapse for immunity to expire, and these gradually pass once more into the unvaccinated class. This is to-day a very large and sometimes very troublesome class to deal with:

Smallpox is one of the very few diseases we have a specific for. We have conquered syphilis, diphtheria, malaria, yellow fever, and if to-day we have not thoroughly conquered smallpox by vaccination the fault is ours and not in the remedy. It ought not to exist.

There are certain conditions which seem to me to predispose towards this disease: (1) A lowered vitality, hunger, overwork, sweating, and let us add alcohol. The widespread popular notion of using so much whiskey certainly conduces to bring on delirium early in this disease. (2) As in other diseases, there is in some few a natural immunity, possibly 1 or 2 per cent. of people. Boerhaave, the great Dutch physician, was a curious example of this, yet he was broad minded enough to preach the contagion of the disease. (3) There is also a liability or receptivity to it, and at certain ages almost all are liable to it. This is curiously illustrated in certain families—the Stuart kings of England, Louis XIV. and his descendants; the great letter writer of France, Mme. Marquise de Sevigne, her daughter and grandson. (4) It is hard for us to realize that in former times smallpox used to be a disease of children; to-day it is largely a disease of adults. If we were to find some system of vaccinating against measles we would probably have about the same condition in measles as we have to-day in smallpox. Few physicians to-day receive the proper training in contagious diseases, and these diseases cannot be taught in lectures; and how many of us have had to acquire our knowledge by rough roads which

should have been made smoother? As to-day smallpox in our large population centers passes under the control of boards of health, I have tried to treat this from standpoint of diagnosis—the practical side.

There are certain diseases which seem to be constantly confused with it. Among these is "chickenpox." The general impression among physicians seems to be that chickenpox as a disease amounts to little, yet this is one of the most contagious diseases. Dr. Heberden, who first gave us the classical description of chickenpox, regarded it as infectious as variola. From various writers, notably Corlett, we get the idea that varicella is exceedingly rare in adult life; but it affects grown up people oftener than the average text-book gives us an idea of; it spreads rapidly in a hospital ward of children. In fact, chickenpox in the adult has a distinct type of its own. Welch and Schamberg have well illustrated this. They say there is a preliminary period of a couple of days, with headache, malaise, chilliness and fever 101 and 102 degrees. You see at once that this has a close analogy to smallpox, but the symptoms are not so severe in character. If the eruption is copious and not especially characteristic, the regular practitioner may easily be in doubt as to his case. We are only safe in chickenpox in making our diagnosis from the trunk—the farther away from the trunk the more nearly is the rash to that of modified smallpox. But the vesicle of chickenpox is not so circular and they are of various sizes. You may have crops, and some are coming and some are going with every crop; there is a fresh accession of fever, but the fever is short, the vesicles are pearly in character, they are out quick, easily ruptured, they set lightly on the skin. The rash of smallpox is small and round and fine; the vesicle in chickenpox, if large, is apt to be elongated; the areola of smallpox is circular, the redness of the areola of chickenpox is superficial, flashy; it seems to be a tinging of the skin or a staining rather than an induration.

Measles usually affords no difficulty, but in all history these two diseases have usually been associated in mind, as, for example, the treatise of Rhazes on smallpox and measles. Both these diseases are at a certain stage papular in character, but measles remains papular, while smallpox passes on to the next stage and becomes vesicular; measles has more tendency to groups. In measles the fever, which has often been slight, tends to increase, whereas in small-

pox, when the rash appears, the temperature drops, the general symptoms are alleviated and the patient says he feels better. There are cases, in the colored people particularly, where the skin is very dark, that at the papular stage it is quite difficult to be sure—you had better wait for the next stage to appear. Measles is soft and velvety to the feel; its tendency is towards clusters or groups, but the tendency of smallpox is to individualize. How many times do we practically have to depend on the progress of the rash for a diagnosis? For the history of the case may not be obtainable, or, if obtainable, may be unreliable.

Syphilis.—It seems generally agreed that the pustular syphilide, most nearly of all eruptions, resembles smallpox; in fact, in the absence of a definite history, the differentiation is puzzling. If the eruption is plentiful and absent from the hands and feet the chances are in favor of syphilis; this often appears in crops, it has a large indurated base; there is no umbilication; there is a tendency to ulceration; there is a friable crust, and taken altogether there is something in the general appearance and look of it which leads us to think of syphilis rather than smallpox. Then, too, one can always resort to vaccination. The pustular syphilide has a longer history; its constitutional symptoms are milder; its crusts are crumbly. It occurs often enough to be a troublesome diagnosis. If we resort to vaccination and get a positive "take," it may clear up the case; a negative result, however, is of much less value. In the consideration of any case vaccination should always be carefully inquired into. Smallpox is rare within three or four years of any good vaccination; after this it occurs with increasing frequency according to the progress of time. In children it holds very well for the first five years and may hold well for five years more. In all doubtful cases we should resort to vaccination as a test. We have no good term for what are called "varioid" cases. If we say "modified" cases, most of us understand that these occur after vaccination.

But mild smallpox can occur without any vaccination, and there may be no complications and no secondary fever. We have had these mild cases forcibly called to mind of late years, following the period of the late Spanish war. These cases spreading from South to North covered a wide area of our country; at first they were found almost wholly among the negroes. There were great differences of opinion among

medical men and the eruption was given various names. It was called "bumps," "elephant rash," "Cuban itch," "chickenpox." Welch, of Philadelphia, says that in an experience of twenty-nine years, covering 5,500 cases of smallpox, he had never seen such mild cases. But it is a familiar fact that the intensity of smallpox poison may be exceedingly variable, so mortality may vary according to the epidemic. But the tendency of the disease is to return to its normal type and resume its old familiar form. This mild type is still with us; it spreads pretty rapidly, and it has lately been seen in our State at Newton, N. J. There seems to be some alteration of the virus, for, take it altogether, it is not of as high grade of infection as the regular smallpox, but it needs the same precautions.

I have said that smallpox was a disease of historic memories. Our history is full of it. It was one of the greatest destroyers of the American Indians. Pocahontas, the Indian princess, died of it. In Westminster Abbey one sees the bust of Sir Peter Warren, well known in our early colonial history. The artist Roubilliac, only too faithful to nature, has carved smallpox pits on the nose and right cheek. George Washington's face was marked with smallpox to the end of his days, and Benjamin Franklin, though he believed in inoculation, lost his four-year-old son by this disease. It was on the vessel that bore William Penn to this country, and thirty of the passengers died of it. When Abraham Lincoln had the varioloid in 1861 he took a humorous view of his trouble; he said, "tell all the office-seekers to come and see me, I have something now I can give to every one of them." It was among the slaves of Thomas Jefferson, and he lost thirty slaves.

Lately Sir Frederick Treves, speaking of the great results achieved in the reduction of the mortality from infectious diseases, said that he "looked forward to the time when it would be as anomalous for persons to die of scarlet fever, typhoid, cholera and diphtheria as it would be for a man to die of a wolf's bite in England." So, too, Thomas Jefferson wrote Jenner in 1806, praising vaccination as a greater discovery than Harvey's discovery of the circulation; he says, "future nations will know by history only that the loathsome smallpox has existed and by you has been extirpated." A hundred years have gone by and Jefferson's prophecy has not been fulfilled. Where rests the fault? It is not in the remedy.

The fault rests on us. We have not done our whole duty. Smallpox cases are to-day an additional and unnecessary burden on the taxpayer. It is much cheaper for a community to vaccinate and re-vaccinate. We need the power of compulsion for the unbeliever and the negligent; we need a thorough compulsory law for New Jersey. We are to-day behind the heathen nation of Japan. If all of us were vaccinated, any occasional case could be treated in any of our ordinary hospitals and at slight expense. There would not be that wild or superstitious fear which seems to pervade our communities.

I therefore advocate in all sincerity an absolute compulsory law for New Jersey, based on the medical knowledge and experience of the last hundred years. This will bring New Jersey up to the level of scientific advances and remove one disease which no longer has any right to exist in a civilized community.

DISCUSSION OF THE FOUR PAPERS ON THE ERUPTIVE DISEASES.

Dr. H. J. F. Wallhauser, Newark.—I have listened with pleasure to the various papers and wish to congratulate the gentlemen on the thoroughness they have displayed. The subject of eruptive diseases is interesting to all of us, involving, as it does, a majority of the diseases we are called upon to treat. A great deal is being done at present in laboratory work, and it is to be hoped that the progress that is being made will soon enable us to clear up many doubtful points. I have been particularly interested in the differential diagnosis of the eruptive diseases and shall confine my remarks mainly to this part of the subject.

In making a diagnosis we are to be guided by the manner of onset, or stage of invasion, and character of the eruption. While we can surmise the possible character of the condition during the stage of invasion, we are not justified in giving a positive opinion until the eruption has become fairly well developed. Catarrhal symptoms, with conjunctivitis, preceding a maculopapular disseminated eruption that is not progressive could not be mistaken for any other condition than measles. While röteln is probably a variety of the same condition, it can readily be differentiated, as it is ushered in by malaise and enlargement of the postcervical lymphatic glands, only differing from measles in the absence of catarrhal symptoms, which, if present, are slight compared with the catarrhal symptoms preceding and accompanying measles. Röteln is not a well-defined disease, but is probably a variety of measles, with an added erythema. It may resemble measles or scarlet fever, probably due to the degree of hyperemia present. The fourth disease of Duke, which has not been mentioned this morning, is probably an aberrant form of measles. We can conceive of an etiological factor that, acting on the physiological functions of the skin, may cause nutritional disturbances, with hyperemia, producing various morphological changes; and, as we already have enough trouble

in differentiation, it is to be hoped that these conditions will be more clearly defined and classified in the near future.

The diagnosis of varicella can readily be made from the eruption alone. If we remember the successive crops of maculo-vesicles, appearing at intervals of a few hours during several days, giving rise to multiformity of lesions, we shall have no difficulty in classifying this disease. It is the multiformity of lesions that is characteristic of varicella, umbilicated vesico-pustules, crusted lesions, etc. This, with the history of mild or absent symptoms of invasion, should easily establish the diagnosis.

In scarlatina, the stage of invasion is of the utmost importance, since so many other conditions present an eruption indistinguishable from that of scarlet fever, so that in many cases it is only with the greatest difficulty defined. Here we should bear in mind the various forms of erythema, particularly erythema urticans and erythema scarlatiniformi. In erythema urticans, we have an extensive, quite uniform, red eruption. It is generally due to gastro-intestinal irritation, and may also be preceded by nausea and perhaps vomiting. The regularity of the onset, however, is absent; and if we carefully examine the eruption we shall find that it is more raised than is that of scarlet fever. While we may have healthy islands of skin in scarlet fever, they are not so apparently depressed as in erythema urticans. Furthermore, this form of erythema is intensely itchy; and in some locations, particularly the extremities, will be found various-sized wheals, which, with the absence of the red-looking tongue of scarlet fever, should remove all doubt. Waiting a few days to observe the advancing character of the condition, will clear up the diagnosis.

In erythema scarlatiniformi, we have a condition that, in a well-marked case, cannot be differentiated with certainty by the appearance of the eruption. It consists of a punctate erythematous eruption, varying in extent and distribution; but it may be general and followed by desquamation in branny flakes or large, thin scales. The constitutional symptoms consist of a mild temperature and malaise, although in many cases these are absent. The only indication of abnormality is, then, the eruption. In other cases there may be a high grade of fever, which gradually subsides as the eruption fades. In these cases there will be a history of symptoms closely allied to la grippe—such as headache, backache and extreme exhaustion. The tongue may be furred, but the papillæ are never enlarged, except at the tip or border, and the epithelium is retained, thus establishing a strong point of difference between this condition and scarlet fever in the absence of the so-called strawberry tongue. There are no secondary complications, and a patient, having once had an attack, is subject to recurrences at intervals of several months or years. Thus, while we have a condition identical in skin manifestations with scarlet fever, its progress and clinical course are entirely different. It can be differentiated as follows: (1) The onset is gradual; (2) The febrile reaction is slight or absent; (3) There is slight, if any, constitutional disturbance; (4) There is no uniformity regarding the appearance of the eruption, which may begin on any part of the body; (5) There is no history of exposure to the contagion of scarlet fever; (6) The strawberry tongue of scarlet fever

is absent; (7) There is usually a history of recurrent attacks.

In a case under my observation, the patient has had seventeen attacks. The attack is usually ushered in with high temperature, varying from 103 degrees to 105 degrees. I first saw this patient eight years ago. Scarlet-fever signs had been twice placed on the house, since which time she has had an attack about every six months. Desquamation follows in about three weeks in large, thin scales. I intended to bring a photograph of this, but am sorry it was forgotten. Dr. Williams has remarked that we cannot make the diagnosis of scarlet fever, with certainty, until the stage of desquamation is reached. I think we could not do so then if we had not been able to before; because erythema scarlatiniformi desquamates about the same as scarlet fever, though it lacks the other symptoms.

In the diagnosis of variola, we are guided by the sudden onset of the disease, accompanied by severe constitutional symptoms—such as chills, backache, headache; also by the appearance of the eruption on the third day, with a subsidence of the constitutional symptoms. There is usually no difficulty in distinguishing the condition, except in atypical cases, from the characteristic stage of invasion and the appearance of the eruption. We must carefully examine the character of the individual lesions and weigh each symptom. In the early maculo-papular stage, we are to remember measles, which it most closely resembles. Waiting twenty-four hours for the development of the vesicular stage will usually decide between these conditions. Furthermore, while there may be a suffusion of the conjunctivæ in variola, the catarrhal symptoms found in measles are absent. In the vesico-pustular stage we should remember pustular syphiloderma and varicella. Other vesicular conditions may sometimes be mistaken for variola—such as impetigo, acute malignant pemphigus or the dermatitis herpiformis of Durhing. In these cases, however, only extreme carelessness could be held responsible for such an error. In impetigo, we have a superficial, large, flaccid vesicle; in pemphigus, pea to dime-sized blebs; in dermatitis, successive crops of papulo-pustules, accompanied with erythematous lesions of various kinds. These conditions are entirely different and should easily be recognized. Pustular syphilide may resemble the eruption of variola so closely that a distinction cannot be made. Here we should be guided by the history. In pustular syphilide, acute constitutional symptoms are absent. There will usually be a history of initial lesions and other signs of syphilis will also be present in most cases—as mucous patches, alopecia, etc. The eruption of syphilis is slower in evolution, which is a strong point of difference between these conditions. Careful observation for twenty-four to forty-eight hours will usually establish the diagnosis.

Varicella lacks the constitutional symptoms and comes on in successive crops. There is also a distinct difference in appearance, character and evolution of the individual lesions. In varicella, the vesicle arises from within a red areola, the erythematous areola resembling in color scarlet fever, while the vesicle of variola arises abruptly, with a purplish-red, hard base, resembling measles in color. These conditions are so dissimilar that a diagnosis can usually be made, although cases occur in which there are only a few skin lesions present, which do not run a typical

course, and in these cases there will always be an element of doubt.

Prof. G. H. Fox advises vaccination in this class of cases as a test. Within three or four days following vaccination, we shall be able to determine whether the vaccination has been successful or not. A negative result would not have any great value, while a positive result would exclude smallpox. In doubtful cases we are justified in isolating until all signs of suspicion have disappeared.

Dr. E. B. Silvers, Rahway.—I was graduated in 1852, and early in my professional career it was thought that no two diseases could exist at the same time in the same person. Finding a case of measles and of varicella mixed, I called upon some physicians, and they corroborated the fact that in this case the measles was mixed with varicella. In order to prove it beyond any controversy, some of the virus of the vesicles was taken and used to inoculate; and the proof positive resulted. Now I do not know what the theory is, but it has been my lot to see some cases of hemorrhagic smallpox in which the diagnosis was made by Prof. Janeway, of New York city; and I have never known of a case of mixed disease of this last type that the patient did not die. The professor stated that this had been his experience. They were extremely rare cases.

I want to refer to a point in regard to the prophylactic treatment, to which reference has not been made. I saw in an English medical journal long ago a scrap stating that the sulphide of calcium would possibly act as a prophylactic in measles and modify the disease. It later fell to my lot to have an opportunity of testing this. In childhood uncomplicated measles is usually a tractable disease, and domestic treatment is mostly employed. In this case there were nine members of the family. A child going to school brought the disease home. They were not willing to isolate the case, and, unfortunately, two older persons, a young lady and the mother, were taken down. They had it "for fair," as the saying is, with muttering delirium sordes and other typhoidal symptoms. When I first attended these cases, having in previous cases used the sulphide of calcium, I put all the family under the saturated influence of this drug. All the typhoidal symptoms subsided, convalescence was rapid, and two of the children in the family did not take the disease. Since then, I have tested it further; and that there is a great deal in it, I feel convinced; and in cases of confluent smallpox I believe that the disease was shortened, and that pitting was prevented. I simply wish to direct the attention of the profession to it, so that all may test its virtues by making a trial of it.

Dr. D. E. English, Millburn.—I understood Dr. Williams to say that the diagnosis in scarlet fever cannot be made before desquamation takes place. It seems to me that if we study the whole case and consider the symptom complex, the diagnosis can almost always be made long before desquamation. I do not believe in cold baths. They do a temporary good, apparently; but it seems to me that this is always followed, within thirty-six or forty-eight hours, by a worse condition of the patient. The use of a few drops of guaiacol rubbed into the skin, perhaps reinforced by the use of a cold wet towel laid from the sternum to the toes, will usually control the fever.

While I believe that the infection in scarlet fever resides in the discharges from the throat and nose, and not in those from the skin, I think

that a great many poisonous substances are thrown off through the skin; and that these, if not so thrown out, intensify the nephritis of the disease. Therefore, I am much opposed to putting anything greasy on the skin of a scarlet fever patient, to prevent the scales from flying abroad. I use baths of soapsuds and of alcohol, and think that this is a great deal better than to grease the patient.

I do not believe in quarantining for measles, especially in the country. I speak from the standpoint of a country practitioner. Measles in the country is a trifling disease. I have been through four large epidemics of it, and other slight ones; and I have never lost but one case, and this was in a baby that really died of diarrhea. If the country boy does not have measles, when he grows up and goes to New York to get a position in a stifling office, and sleeps in a stuffy hall bedroom, he is likely to contract the disease and die at about the age of twenty-five years. He would not have died if he had had the disease in the country in boyhood. In the country, measles is the hardest disease to quarantine and the easiest to spread. There have been many cases in which the mother has sent a child to me with a note saying: "The children have had measles. Please give them a certificate to go back to school." How, then, can we quarantine for measles in the country? In the city, it is a different problem. The lack of sunshine and fresh air, and the presence and virulence of the pneumococcus, a germ that is not so common nor so virulent in the country, make the disease much graver in the city. Sunlight, air and warmth are the best treatment for measles. The patient should be kept very warm and practically out of doors, as far as possible. To avoid injury to the eyes from sunlight, I place a large pad of absorbent cotton over each eye. I then have the bed drawn up close to the window, where the sun can shine on the patient.

When we come to consider r  theln, it brings up the curious matter of the correlation of the exanthemata. Why do we never see one such disease in a neighborhood without also seeing others? What is the relation between them? I hope this subject will be studied within the next few years. What this relation is, I do not know. To have an attack of one of these diseases does not protect the patients from the other; the poison is not the same, therefore. I remember the cases of two brothers in the same room, one with scarlet fever and one with measles. I studied these cases until the patients were almost well, making a great many more visits than were necessary. Neither of them had had either disease before, and neither contracted his brother's disease.

I do not believe in quarantining for smallpox, because it is not fair to the taxpayers to spend thousands of dollars to protect persons who ought to get vaccinated. The man that does not get vaccinated once in five years ought to be vaccinated by force or imprisoned. That is the way to treat smallpox. The people that do get vaccinated are put to expense because some other men are guilty of criminal neglect.

One little point that Dr. Wallhauser did not bring out is the differential diagnosis between erythema urticari   and scarlet fever. The former is always associated with more or less digestive disturbance.

Dr. Frank W. Pinneo, Newark.—In the treatment of scarlet fever and measles the throat de-

mands particular attention. In all disease, to guard against complications is of primary importance; and in scarlet fever there is no complication more common than that of the middle ear, and none except nephritis is more baneful. Potassium chlorate, as a throat wash, will prevent middle-ear infection. Gargles are valueless for the purpose of reaching anything back of the anterior pillars of the fauces; and, moreover, are impossible in the cases of little children. A throat wash of such dosage and character that swallowing it will be harmless can reach the site desired, and without producing any gastric derangement. Combine potassium chlorate, as basis, with boric acid, as adjuvant, and sodium borate, to aid solubility, in a vehicle strong of glycerine, to adhere to the mucous membrane; and keep the back of the throat wet with it by swallowing. This will prevent middle-ear complications, and I have yet to see it fail.

The history of potassium chlorate is interesting. It is an old remedy, known to have such value that it became abused as a too handy means in "sore throat" of preventing the calling in of a doctor. Cases of poisoning with met-hemoglobinuria caused investigations. Dr. Fountain, of Iowa, killed himself with one ounce. Dr. Jacobi failed to do so with half an ounce, and worked out a rule limiting safe dosage for a child of five years to thirty grains in twenty-four hours. A half-teaspoonful of the following every two hours—eight times in twenty-four hours—would be but half this limit:

R

Potassium chloratis	2
Acidi boraci	2
Aq. ment. piper. } aa.....	1
Glycerini	1
Sodii boratis } aa.....	8
Tr. Cudbear q. ad color	??
Aquæ q. ad	32

The use of this is not contraindicated even in cases of difficult infant-feeding (and those who work in this field must be advocates of not deranging the baby's stomach with medicines); but it can be used harmlessly, and is the most efficient way with the most efficient means. The same principles apply to a tonsillitis and other pharyngeal infections; and in stomatitis, it is a perfect mouth-wash.

Dr. Henry Mitchell, Asbury Park.—I wish to bring out one or two points relating to the prevention of measles. This disease occurs in every civilized community about once in four years. There are very few variations in the records of this State, during the last twenty-seven years, in the occurrence of epidemics of measles, the mortality charts showing great regularity in the elevation and depression of the curves; but in recent years the extremes in the curves are somewhat less than they were in previous years, indicating that some control has been exercised over the spread of this disease.

The most probable reason for this steady recurrence of outbreaks of measles is found in the fact that the disease, in its early stages, is very rarely recognized. The child has a cough, coryza, and perhaps sneezing; and the mother and others that chance to be near the patient believe it has a "cold." The infectious period begins very early; and before the disease is recognized the infection has already spread to all the susceptible persons that have been exposed. The first case does the mischief, and a large number of the community are affected almost simultaneously.

There appears to be some promise that measures to prevent the spread of measles can be found in the medical inspection of schools, conducted under authority contained in section 229 of chapter I. of Acts of the Special Session of the Legislature for 1903. The law provides that at certain periods instruction shall be given to teachers, lectures being delivered by the medical inspectors of the schools. By thus training the teachers to detect the early signs of measles, and by immediate isolation of the suspected cases, pending a medical examination, there is a probability that many centers of infection will be detected early enough to avert some of the outbreaks that would, if not thus controlled, become widespread epidemics.

The infective agent appears to be quickly dissipated by air and light, the disease probably being spread almost solely from person to person. Therefore, the application of measures that are appropriate for the restriction of the spread of scarlet fever and diphtheria will prove useless and a hardship in the case of measles.

Dr. H. D. Corbusier, Plainfield.—I want to speak a few words about the failure of vaccination. Of course, we all know that a good many persons now seriously object to being vaccinated; and I think that very often this is due to the fact that they have seen it fail in certain cases. This was brought to my mind while in the service with the army in the Philippines. On the way over, I had six hundred men to vaccinate. A great many of these had been vaccinated just before entering, or on entering, the service. After having gone over the entire battalion three times, I found a great many who had been vaccinated before were still susceptible; that is, the vaccination that I performed took. In most of these cases the men had very large scars, showing that they had had good sores, ordinarily so called. This may be attributed to the fact that so many vaccinations are carelessly done, or that carelessness is displayed in some manner. Perhaps the arm is not protected, and fresh infection enters; and the take is nothing but a case of suppuration from infection, the virus not having taken hold at all. Most of these cases were ones in which there was a very large scar, the men saying that they had had a good take. I put this down to the fact that it was due to fresh infection, and that the vaccine had not taken effect.

Therefore, I am always careful to protect an arm for a sufficient length of time. That was my invariable practice in the Philippine Islands. I use a cap of celluloid, which you can buy; and a good home-made one is made of a roll of gauze with rubber-tissue over the top, held with adhesive plaster. Both in the service and in general practice I have been careful to protect every vaccination; and I have had very few cases in which the ordinary very sore arm and good take has been present. When persons tell me that they have had a good sore arm, I am always very suspicious. I think that everyone should be vaccinated at least three times, if the vaccination does not take the first or the second time. While I am speaking, I will say that we found that the inoculation—that is, the subcutaneous vaccination—was not so successful as the excoriation of the skin and the application of the virus in that way. I am very much in favor of having physicians compelled to vaccinate the infant in every obstetrical case that they attend, or see that this is done very early in life.

I want to say a word about smallpox among the Chinese. Over in China they have an immense amount of smallpox, which is one of the chief causes of blindness among the Chinese. Probably eight out of every ten persons is pock-marked and has trouble with the eyes. They used to treat smallpox there with red light. The patient is put in a room entirely enclosed in red hangings. I tried to get at their theory, but they did not know why they did it. All they knew was that it has been their custom. In Germany this has recently been tried. To my mind, the theory is that the red hangings exclude the actinic, or ultra-violet, rays of light, which are very irritating to the skin and to the entire system.

One of the best arguments of modern times in favor of vaccination is the fact that smallpox has been almost extirpated from the Philippine Islands since the Americans took possession of them. The disease was formerly rampant there, in every town and village, and even in the country. You could not go anywhere without seeing cases of it. They had no treatment, except to smear ointments over the skin; no isolation, or anything of that sort. Shortly after the troops went there, vaccine farms were established, and every Filipino in the country was vaccinated. This is still being done.

Dr. Duncan W. Blake, Gloucester City.—I should just like to say that we do not find any one distinctive symptom between the discrete type of variola and a severe type of varicella; and until we have some scientific test, mistakes in diagnosis must ever occur.

Dr. Philip Marvel, closing.—I just wish to emphasize a few points, perhaps in a little different manner from what the speakers have, first taking up the remarks by Dr. Silvers, who referred to the fact that my paper contained no declaration in regard to prophylactic treatment. Those of you who listened to it will, I think, agree with me that references were made to prophylactic treatment; but so far as the individual treatment of measles is concerned, I must confess that I am not one of those who believe in treating the disease per se. Since in the majority of cases we have a mixed infection, and since quite frequently we find that the patients are already suffering with an intercurrent or complicating disturbance, it seems only rational to approach the case, and not only of contagious disease, but of any disease, with the idea that we are treating an individual. When we do that, then the particular specific or special treatment, as we may term it, will present itself as we study the case to meet the conditions as they arise. Concerning the claim of a specific treatment for measles, I was not aware that such a treatment exists. I was interested in Dr. Silvers's remarks about his observations in regard to sulphide of calcium, though I presume few of us feel that the observation of the administration of one or another drug in a few cases of any disease would be sufficient evidence that the particular drug in question would be a specific for that disease. Conditions are often modified by one circumstance or another, and we are often disappointed to find that a drug that has had a good effect in one individual has in another little or none. So, until the treatment recommended by Dr. Silvers has been used enough to prove it to be of especial advantage in these cases, I do not feel like accepting it as a specific.

Dr. English has referred to the subject of isolation, especially in measles. I recognize, as you

do, that Dr. English is a gentleman who studies his cases carefully, studies diseases in general carefully, and is a man of advanced ideas and careful thought; but it seems to be a bold declaration for any physician to state that he does not believe in isolation for any contagious disease. He and the rest of us must recognize as we are not dealing with conditions that are ideal, with conditions as we should like to make them or have them; we are dealing with conditions as we find them, and with a mass of ignorance among a great part of the public concerning disease, which we find to be the most distressing obstacle in the way of treating and controlling disease. If we do not deal with these conditions or diseases differently from the manner in which we should deal with the same conditions or diseases when met on the higher planes of life, we shall be responsible for the loss of life that could have been saved. We should put ourselves in a position in which we could properly meet and lessen the spread of disease occasioned by these individuals. Every physician who does not attempt to acquaint his patients with the character of the disease, and particularly with its contagion and how it is spread, so far as he knows, as well as with the way in which they may save other members of their families and of other people's families, is not discharging his duty. It is his duty to insist upon isolation, so far as possible. Circumstances will not always permit of complete isolation; but we discharge our duty only when we look after the greatest interests of our patients to the best of our ability.

Dr. English also spoke of the fact that isolation is not needed in the cure of the disease. We all recognize that. It is not with the object of curing the disease, but with the object of protecting others from it, that we isolate the patient. He likewise referred to a fact that we all recognize, viz., the relation of different infectious diseases occurring at the same time. We have all been puzzled by the same question. While I am not prepared, any more than he is, to answer it fully, I would say that reference was made in the early part of my paper to the theory of there being only a single or primary cause for the more prominent contagious diseases; this is being accepted to some extent among the Germans and among the Russians to-day. It is believed by many clinicians in these countries that the eruptive diseases especially, a number of them at least, are due to one primary cause; that the environment and the condition of the individual at the time the disease occurs make the difference in the manifestations; and that the different manifestations do not constitute distinct diseases. This brings up the fact that an attack of measles will not prevent an attack of scarlet fever, and that one of röteln will not prevent one of measles, etc.; but these facts alone do not prove that they are or are not separate diseases. This advanced position is now being advocated by a few in this country, and it is interesting because this theory is upheld by some of our ablest clinicians abroad. What is to be the outcome, I am not prepared to state; but I shall follow the same with much interest.

Dr. Pinneo has referred to the action of chlorate of potassium in preventing middle-ear disease. This is rather an astounding declaration, and I shall be interested to follow the effect of this drug in this class of complications. According to recent investigations by Hektoen and a few other pathologists, these complications in

scarlatina, measles and tonsilitis have been proved to be due to the streptococcus. If what Dr. Pinneo says is true, and I do not doubt his honesty of statement, we are now put in a position where we can prevent the middle-ear complications in scarlet fever, as well as in measles and also in the tonsilar infections with the streptococci, viz., in tonsilitis.

Dr. Mitchell has referred to the fact that we have not been able to control epidemics of measles. It seems to me that the fault lies to a very great extent in the position taken by Dr. English, which is also taken by a great many other physicians, viz., that isolation is unnecessary in that disease. If we do not believe in isolation, we do not believe in the proper and sole protection of those who have not yet had the disease, and who, in consequence, are not immune. We cannot afford to take this position. It seems to me that I need not dilate further upon this point. Dr. Mitchell has also referred to what I believe to be one of the first and most progressive steps in the control of epidemics of measles, and as well of other contagious diseases, viz., the inspection of our public schools and instructions to our teachers. I wish he had gone farther and added, "special instruction to the physicians who are made inspectors of these schools." If these physicians are made acquainted with all these different diseases and the necessity for complying with the minute detail of protection, thus becoming experts in their recognition and prosecution, no further question will arise as to the great control being exerted over the spread of these epidemics.

Dr. E. E. Worl, closing.—Last night I listened to Dr. Howard A. Kelly, who said that God had given us the privilege of stopping tuberculosis, but had placed the condition upon it that we should do something ourselves. It is the same with smallpox. If we allow the disease to go unquarantined, God will not give us the privilege that Dr. Kelly spoke of. I have attended a great many tuberculosis meetings, because this is the fashionable disease just now, although smallpox is still the king of diseases. You never will control tuberculosis, or any other disease, until you begin with the factors that create it. Measles is a disease that carries off more children under the age of two years than does any other infection except whooping-cough; and when it does not kill it leaves a tendency toward enlarged glands, which is a fruitful source of tuberculosis.

I believe with Dr. Mitchell that if the teacher can point out a child that is sick, this will be a source of control for measles. I do not believe that anyone ought to have any disease that he can escape. No one likes to have a disease, even a simple one that is not fatal and he will be sure to get well of. Let us, by all means, arouse the public interest in measles. We want uniformity of practice all over the State. I do not believe in special legislation for either the country or the city.

Regarding the failures in vaccination for smallpox, they are mainly our fault. The old country physician rarely failed. He took a scab and passed it from arm to arm. I was vaccinated in that way, and I wish to say that it is a perfectly good method, and in most cases perfectly successful.

Dr. D. E. English.—I should like to explain, in the first place, that I spoke from the standpoint of the country physician, and I think that Dr. Marvel must have misunderstood me, for I said

nothing about isolation as a part of the treatment of measles. I do not believe in quarantining it in the country. I believe it is the best thing that could happen, and for the public good, that every child in the country should have measles before the age of ten years.

Dr. H. Williams, closing.—I understood that Dr. English had lost but one case of measles. I accept his statement, but consider it very remarkable. I hope that others can say as much; I cannot, and I have never before heard a man make a statement of the kind. Regarding cold baths in scarlet fever, I have looked up the literature on that point very thoroughly, and I am ready to maintain that the trend of public opinion among physicians who have used them is that they do good, and do not cause, but diminish, the nephritis.

Dr. Silvers.—Dr. Marvel did not understand me when he said that I claimed that sulphide of calcium is prophylactic. I believe it to have prophylactic powers, and wish it to be placed on trial. I think the stenographer will bear me out in this.

Dr. W. J. Chandler, South Orange.—I do not want to see the ideas underlying Dr. English's denunciation of enforced quarantine in smallpox so disagreed with. There is right on both sides and we have not yet reached the solution of the problem. If we could protect ourselves from other diseases as well as we can from smallpox by means of vaccination, I should be in favor of abolishing enforced quarantine in all diseases; but I would not do it now. In enforcing a rigid quarantine for smallpox, we are punishing many innocent persons for the crimes of a few wrongdoers. We must modify our laws; otherwise great injustice will be done to every one suffering from smallpox.

Dr. Marcy.—I should like to endorse those sentiments.

THE PROPER DIRECTION OF THE FORCES OF HEREDITY*

BY William A. Wescott, M. D.,
Berlin N. J.

Before transmitting the gavel to my successor, it is a pleasant duty to be able to express my keen appreciation of the honor of having wielded that instrument ever so feebly.

Our social intercourse has had no less value than our organized professional intercourse. To have come in possession of a better acquaintance with the characteristics of the personalities which constitute this society is a distinct advantage and a great help to each of us. Let us trust that the years to come will augment an hundred fold this personal and social element, augment it so far as to make of our organization something more than a body of scientific men, a well-knit organization of friends and brothers. Unfortunately there has existed at

*Read at the meeting of the Camden County Medical Society October, 1907.

times and in places something less than this lofty standard of conduct, perhaps a tendency to personal criticism, if not a temptation to undermine and disparage. While such a type of conduct and sentiment has found no favor amongst cultured professional gentlemen, it is certain that our interchange here of personal intercourse and professional endeavor are sure in the end to find the spirit just alluded to an utter impossibility. Amongst intellectual men whose work is humane and alleviatory nothing less than an exalted standard of ethics is conceivable. Ours is not so much a profession for individual distinction and aggrandizement as it is a profession whose grand aim is the good of humanity. Such a conception implies prompt readiness, even anxiety, to respond at all times and under all circumstances to the demands of each other in those struggles with pain, disease and death which fall to the lot of us all. Our society, it seems to me, has and does powerfully engender the spirit of brotherly responsiveness. Indeed, it is the glory of the true physician that he unselfishly answers the call of his brother, but it is a greater glory yet that he ever promotes the good name, fame and other interests of his professional associates. Hence the marked honor of my call to this chair can find no explanation short of that essential nobility of character which draws no distinction between the city physician, close to the sources of information and power, and the rural healer with his scant resources and his isolated condition. It is with the warmest estimate of these lofty sentiments and purposes that I extend to you my obligation and pledge to you my unstinted efforts to move in the direction pointed out by your sentiments and aims.

The occasion may warrant the expression of some views concerning our duties in a wider field than we are wont to travel. The doctor is an expert; his work is special. It is the investigation and healing of disease. Some limit themselves to specific study and experimentation. One reaches distinction as a specialist, few as all-around practitioners. The physician's life work is, in every sense of the word, personal work. Circumstances lead, often drive, him to himself, his individual resources. He largely lives the life of an unassociated force. The very nature of his art makes him seclusive, recondite, occult; forces him to live, as it were, a single, not a general; a specific, not a collective life. Hence, as a rule, the healer comes to deal

well nigh solely with the case in hand. There begins, there ends his work. His function becomes almost entirely a personal one. Upon the case before him are concentrated his learning, experience, skill. And thus goes his life. Surrounded by a species of mystery and magic, his power is limited to the concrete. It does not go out into the general, in *all* life.

The fact thus roughly put, compels the inquiry—Is there not yet a wider, better, more efficient work for the medical profession? Are there not room and opportunity for more general work, bigger results, more universal good? It is not the purpose to point to civic duty or participation in the public administration.

The recent war between Russia and Japan gives concrete expression to the generalization desired to be reached. The Russian side of the medical campaign typified the prevalent limitations upon the physician's work. Its principle was to deal with the case at hand and then stop. It began and ended there. The result was an enormous mortality. The Japanese side of the same medical campaign astounded the world. Its theory was the direct antithesis of the Russian theory. It meant to prevent, to provide in advance, to defeat the case in hand, so that when the case in hand arose, it should not be fatal. The result again was the extreme opposite of the Russian. The Japanese principle was enforced hygiene. Each soldier was taught the essentials of health. If wounded, he was surrounded with conditions fundamentally hygienic. The Russian sought the case in hand; the Japanese prevented the case in hand. One waited for disease and wounds to come; the other provided against disease, and hence conquered the wound when it came.

Before I leave this marvelous object lesson presented by the Russian-Japanese war, let me partially digress for a moment and consider the influence of stirpe-culture in raising Japan to a high level among nations and producing a type of physique and mental poise never excelled. A little employment of the microscope; a companionship with a few such souls as Spencer, Darwin, Cook, Maudesly and an ordinarily intelligent mind will be imbued with the belief in the immutability of hereditary law. From the first cleavage of the rhizopod, the primal fission of the hydrozoa, to the reproductive act of the highest expression of organized life in its physis as well as its somatical effect, like produces like. The rule is as unchanging as the conservation

of force, or the law of gravitation. Any seeming modification is explained by changed nidus and pabulum, or a different relationship with the flora and fauna. Every instance of atavism, when intelligently considered, proves the law. The Japanese obey one central government; bow to one religion; exhibit a contempt for existing conditions in their plans for the future; show a patriotism beyond the love of life. 'Twas hereditary law, made living by these facts that broke the fastness of Port Arthur and shocked the brightest minds on earth to wonderment.

What was done in this instance should be done generally by the medical profession. We should prevent disease, and thereby, when it comes, more easily conquer it. This implies a reversal of general practice. It implies an indoctrination of the philosophy of health. That an ounce of prevention is better than a pound of cure should come to be embodied in our joint and individual professional efforts. The doctor should no longer wait for the case in hand. He should prevent it altogether. We all know that the vast majority of the cases in hand are directly due to disregard of the simplest laws of health. Hence, is it not manifest that an application, enforced, if need be, of the simplest laws of health would prevent the vast majority of the cases in hand. If so, then opens before us this wider, better, nobler, more efficient field of labor. The physician, especially qualified as he is, must become a teacher first, a healer afterwards.

Of practical suggestions in this line, I would say that, first, correct hygiene should be taught and enforced in our medical seats of learning and not be left to implication. For where is the physician who can heal himself? Where is the physician who can prevent himself from becoming a case in hand? Secondly, we should see to it that every public school should teach and enforce hygienic rules and practices. If a sound brain is to be found in a sound body, a sound body is the indispensable condition of public worth.

Thirdly, our private schools and colleges should have endowed chairs upon heredity, stirpe-culture, health. A conspicuous part of the curriculum should enforce practical knowledge of such themes. Fourthly, the State itself should establish public instruction in the same direction, and aid the desired result by a public record of the birth, death, cause of death, characteristics, and antecedents of the citizen. Lastly, the medi-

cal societies of this and other States should make it a part of their discussions and efforts to devise ways and means of teaching and making compulsory hygienic conduct and the philosophy thereof.

Let it be taught and implanted into the understanding of every American that while nature tends toward perfection and extends a welcome to truth as beneficent as the will of God; yet that power which coördinates the movements of germinal matter will transmit a type, a disease, a perfection, a deformity, that every phase of moral degeneracy, all tendencies to crime and its inhumanity to man, as well as spiritual and mental grandeur are as certainly reproduced by the laws of heredity. It might not be unprofitable to enlarge upon these suggestions. My purpose has been to hint merely at a theme which, properly conceived and well applied, would make the physical, mental and moral state of man vastly better than it now is, which would make of the doctor a public benefactor rather than a personal one; which would make him not only the magic healer of the case in hand, but the physical, mental and moral regenerator of the race.

CONTRACT PRACTICE.

(From the *A. M. A. Journal*, December 14, 1907.)

On several occasions correspondents have asked whether or not the position of railroad surgeon comes under the head of contract practice—a question of such a general character as to make it impossible to answer it satisfactorily without discussing the entire subject. Contract practice is of such vital importance that it seems worth while to discuss the entire subject with special reference to the fundamental principles involved.

In one sense, all medical practice is contract practice, since the courts have held that when a physician assumes charge of a case there is a contract, implied if not expressed, between him and the patient (if of legal age, or, if the patient be an infant, between the physician and the parents or guardian). Legally speaking, a contract is simply an agreement to perform certain acts for a certain consideration. There is no reason why a physician should not enter into a contract with an individual, firm or corporation the same as any other citizen, so long as he does not infringe upon the rights of any one else; the majority of cases of so-called contract practice, however, do so infringe, and are therefore objectionable.

Admitting that all forms of medical practice are contract practice and that there is no reason why a physician may not enter into a contract as may any other individual, what are the particular forms of contract practice in which there is an expressed contract rather than an implied one? For convenience, we may classify such contracts under these heads:

1. Contracts entered into between a physician and an individual for purely personal purposes, such as the employment of a physician by a wealthy

thy invalid traveling for his health and desiring the entire services of the physician. In such a case, the relations between the physician and patient would be exactly the same as would obtain between any physician and patient—entirely a personal matter. The physician would presumably charge what he considered his services worth. The rights of no one else would be in any way invaded.

2. Contracts between a physician, on the one hand, and corporations or business organizations of any kind on the other hand, such as contracts with railroads, mining companies, large manufacturing companies. The object of such a contract is not benevolent or philanthropic, but is purely an interested one on the part of the firm or corporation, in that experience has shown that it is necessary for the company, in order to protect its interests and to prevent, or to successfully defend, unjust suits for damages brought by employees, to have a competent physician and surgeon in the employ of the company who can examine all employees injured in the discharge of their duties. In some cases there is a mixed motive, and the action of the company is partly benevolent and partly co-operative and socialistic. An illustration of this is found in the benefit organizations of some railroad companies, in which the employees are given medical attendance and hospital care for diseases and injuries other than those contracted or sustained in the service of the company. The economic justification for this is found in the fact that it is to the interest of the company to keep its employees in good health. The animating motive, however, which has led industrial organizations and large corporations to employ surgeons and establish hospitals, has been, primarily, self-protection. It should also be noted that, under present economic conditions, such self-protection is an economic necessity to the success of any large business or one employing large numbers of men. This phase of the question will be discussed more fully later on.

3. The third form of contract practice is that in which a contract is entered into between the physician and an organization, made up of voluntary members, not established for any economic or commercial enterprise, but purely for social or fraternal purposes. Under this heading come all fraternal orders, lodges, benevolent associations, etc., which have been recently organized in such large numbers. Possessing generally some peculiar feature, such as fraternal life insurance, weekly sick benefit, etc., there has been grafted on to this plan, as an additional drawing card, the plan of furnishing medical care to members and their families at a purely nominal price. A lodge or society having two or three hundred members will levy a sick benefit of \$2 per year on each member, and with this amount will employ a physician under a contract which requires him to furnish medical attendance, and in some cases medicine, to members alone or to members and their families, whenever he is called on to do so. This form of contract is what is known as lodge practice or club practice, and is a development, in this country, of the last fifteen or twenty years.

4. A fourth form of contract practice, and the lowest of all, is found in the burial and aid associations, which are really industrial insurance companies, with free medical attendance as an added inducement.

It will be found that practically every form of contract practice is included under one of the

four headings. Let us now endeavor to ascertain what, if anything, is objectionable, about any of them, and if so, why and on what grounds such methods of practice should be condemned.

As to the first form, we are unable to see how a contract, whether written or verbal, between a physician and a single individual for certain professional services for a certain amount, differs except in degree from the agreement expressed or implied between a physician and any of his other patients.

The distinct feature about the second form of contract practice described, and that which differentiates it from the third form is that in the case of railroads, mining and lumber corporations, large manufacturing concerns, etc., proper care of employees injured in the performance of their duties is an economic necessity for the successful conduct of the business, and is one which has grown up through appreciation of this necessity. Surgeons are not employed by railroad companies, for instance, for the sake of the individual employees, but merely because experience has shown company surgeons to be necessary. Another reason is that large corporations are frequently the object of suits brought by employees for damages sustained through injuries. Experience has shown that it is necessary for a company to have a competent physician to represent it, and to make an examination and to report at the time of the injury in order that the company may have a record of the injury. If railroad companies, both steam and electric, and large manufacturing concerns, etc., did not take such precautions, they would suffer great loss and perhaps even be wiped out of existence by damage suits in the course of a few years. Such protection is an economic necessity.

In the case of mining and lumber companies, an additional factor must be considered. Many mines, large lumber camps and saw mills are located at isolated points. Their location is not a matter of choice, but of necessity. A body of ore is discovered and a mine developed. Around this mine will be built a small village or town, in which the sole interest is the mine, the one thing which brings men to the place. Perhaps the number of employees or the number of inhabitants of the town is too small to justify a competent surgeon in locating there. As both company and the employees need competent medical service, an arrangement is frequently made by which the company pays a surgeon a fixed amount, and, in most instances, deducts a pro rata amount from the wages of each of its employees. Aside from the reasons mentioned, the justification for this form of contract practice is found in the fact that the isolation of a mining or lumber camp practically removes it from the competitive conditions which obtain in more thickly settled and more accessible communities.

From the above considerations we may conclude that contract practice is not only unobjectionable, but is justifiable, when there exists a plain economic necessity for it or when the circumstances under which it develops are such as to rule out the usual competitive conditions found elsewhere, provided the conditions, rate of compensation, etc., are equitable. It should be emphasized, however, that unless the company surgeon is the only available man and consequently, not in competition with another physician, there is no reason why the company should require the surgeon to furnish medical services to the fam-

ilies of the employes as part of his work for the company.

Taking up now the third form of contract practice, that in which an agreement is entered into by a physician with a lodge, club, society or other organization, we note, first, that there is no economic excuse or justification for this sort of practice. If a man works for a certain railroad company, that company has a perfect right to say as one of the conditions of his employment that if he is injured he shall be examined, if not attended, by a medical representative of the company in order that the truth regarding his injury may be known to the employing corporation. There is no reason, however, why the fact that a man belongs to a certain lodge should entitle him to professional services at a few dollars a year, while his neighbor, living under exactly the same circumstances and drawing, perhaps, the same wages, but not belonging to the lodge, has to pay a much greater price for the same services. In other words, medical attendance is not an economic necessity for lodges or fraternal organizations, but is simply an added feature for the purpose of procuring members by offering them the inducement of medical services at a purely nominal figure. If the organization is a social and fraternal one, medical attendance is not necessary for its existence. If the organization has no other object than to furnish medical services, then the organization exists solely for the purpose of buying medical services at wholesale rates and selling them to its members at retail rates.

The objections to lodge practice are:

1. There is no reason for the existence of such a system. This has been discussed above and will not be further considered.

2. In making such a contract, a lodge asks the physician to give an indefinite amount of service for a fixed amount of compensation. The usual plan is that a physician is paid a certain amount per member per year for whatever attendance they may require. If the member or his family are not sick at all, then they pay for something they do not receive. If the member and his family have a great deal of sickness during the year, then they receive something for which they do not pay.

The plan practically amounts to a bet between the member and the doctor as to whether or not the member will be sick during the year. The member puts up \$2 and the doctor puts up unlimited services. If the member is not sick, he loses, and if he is sick, the doctor loses.

The principle of fixed, limited compensation for indefinite, unlimited services cannot be defended on any grounds. It might be argued that the same objection applies to railroad and company work, as outlined above. But the surgeon employed by a company is employed not for the purpose of rendering personal services to the individual patient, but is employed as the medical representative of the company. His relations are not those of a physician to an individual patient, but are those of a medical advisor to a company, for which he receives such compensation as may be agreed upon.

3. The third objection to lodge practice is that it invariably introduces the element of ruinous competition among physicians. If one doctor agrees to do lodge practice for \$2 per member per year, some cheaper man will soon agree to do the same work for \$1.50 per year. In this way the price of medical services is reduced to a ridiculously small amount. This, in turn, affects the

quality of services rendered and thus works harm to the patient, the family and the entire community.

This objection will also hold against railroad or corporation work, where physicians are induced or allow themselves to underbid each other.

4. From the standpoint of both the patient and the physician, the greatest objection to lodge and club practice is that the physician cannot afford to give good services for the amount he usually receives, while his compensation is not in any sense affected by the quality of his services. It therefore follows that the physician gives poor services and the patient receives poor services. This is detrimental to all parties concerned.

So far as the fourth form of contract practice, viz., sick benefit and burial societies, usually known under some high-sounding name, which issue policies to the poorer class of working people, providing them with medical services, medicine, etc., sometimes at as low a rate as 10 cents a week, this is the lowest form of contract practice, for which absolutely nothing can be said in defense. The promoters of these organizations are simply farming out the services of the physician, buying them wholesale at the lowest possible price and selling them at retail for all they can get and realizing the difference as their profit. The report of the Bureau of Associated Charities of Chicago, made through the Committee on the Abuse of Medical Charities of the Chicago Medical Society last spring, showed that in some cases the total compensation paid to physicians employed by these companies amounted to 24, 51 and 75 cents per month. Such contracts are degrading to the patient as well as to the physician, and are pauperizing to both. They should not be tolerated for a moment; there is no excuse for their existence. Patients not able to pay more than the sums mentioned can always be taken care of in public dispensaries and charitable institutions. Physicians who are willing or who are compelled to work for such prices are a menace to their patients and to public health on account of the quality of service which they must necessarily render. They should not be tolerated by the public, to say nothing of the profession.

In the light of the above, it becomes evident that a railroad surgeon is unquestionably a contract surgeon. In the case of railroad companies, there is an economic justification for the contracts which they enter into with physicians and surgeons, which has developed from the necessities of the case. So long as the contract between the railroad company and the individual surgeon does not infringe on the rights of others nor introduce the element of ruinous competition between physicians, there is no reason why any exception should be taken to such an arrangement.

We are free to say, however, that we consider that the prevalent custom among physicians in smaller towns on railroads of accepting a position as railroad surgeon for the sole compensation of an annual pass is belittling both to the individual surgeon and to the profession, and many a good man has been ruined thereby. It should be eliminated by the surgeons themselves. Good work, properly done, entitles one to proper compensation. The railroads must have competent surgeons for their own protection. They are perfectly willing to get as many men as possible on a transportation basis, since it is much cheaper for them, but if they were not able to obtain good men on this basis, they would prefer to pay cash rather than to accept the services of poorer

men or to do without any medical services. There is also no excuse for the purely nominal compensation in many cases. There is no reason why railroads should not pay a reasonable price for good services. They will do so, just as the insurance companies have done, rather than accept poor services, since they know that cheap men are the most expensive in the long run.

WHY DOCTORS ARE UNPOPULAR.

Editorial in the Journal of the Minnesota State Medical Association, December, 1907.

The above title was the subject of President Gillette's address before the Academy of Medicine at its last meeting in Minneapolis. Dr. Gillette was decidedly frank in his admission of the faults and weaknesses of doctors as a class, and he gave expression to the criticism of patients upon medical men. It was expressly stated that all kinds of doctors are lumped into one great mass, and the frailty of a few leavens the whole profession in the eyes of the public.

Professional men, particularly doctors, frequently have an erroneous conception of their relationship to their fellowmen and are often governed by obsolete views concerning an ethical standard. The writer was astonished to learn that the members of the Legislature consider any bill endorsed by the medical profession as unsafe to present to, and difficult to pass, this worthy body. The suspicion is still present, delusional or hallucinatory, that whenever a doctor advocates a reform that will be for the benefit of the public at large it must result in pecuniary benefit of the physician.

The influence of the physician, of whatever school, is condemnatory rather than uplifting; hence it is very evident that the profession will have to engage a publicity committee who must educate the people through the daily press; and to reach the press one must lower his dignity or stand accused of self-advertising. At least, this is the attitude of the law-maker and the majority of the people. It is generally conceded that the physician in the family is a worthy and safe advisor, while his goodness of heart appeals to the patient, and his faithfulness and his earnest and painstaking care of the sick make him a lovable friend in time of need; but the moment he steps into the public arena and gives his expert opinion, based upon his study and experience, he falls from his insecure pedestal, forfeits his dignity, and becomes a charlatan! The time will come when the physician will study his political friends and will make himself and his advice invaluable when he is better understood.

The fear of becoming undignified has been a bugbear to the profession of medicine, and it is time this false modesty be cast aside for a broader aim in life, that he may be known, not only as a good physician, but as a good citizen. The public, it is true, are often just in their criticisms, and the profession of medicine must change its ways before it will gain a wholesome and much-needed respect for medical men.

Let us remember the careless and indifferent methods of life insurance examinations; the failure to keep up with medical advancement by not reading books and medical journals; the lack of interest in medical societies; the coarse and one-sided testimony in court cases; the farce of so-called consultations; the needless operations performed; the misrepresentations of conditions to

patients and anxious friends; the vulgar and ungentlemanly comments upon patients, fellow physicians, and new schools of treatment; the indifference of the methods of hospital internes and nurses toward the sick or refined patients who are led to expect courtesy, respect and protection; the elastic or exorbitant fee system that is supposed to guide us in our work; our slack and unbusinesslike methods of collections and our negligence in paying outstanding bills; the reputed division of fees and the fear that the druggist pays tribute for prescriptions; and a host of other things that were formerly or are now a basis of criticism. Is it, then, a wonder that medical men are sneered at, ridiculed, and their kind offices and opinions discounted by the public at large?

We have much to learn and must work hard and loyally before we can be placed in the proper light before public and business men. It goes without saying that many medical men are honored and trusted, and that their opinions are valued and appreciated, but it will be some time before doctors as a whole will occupy a conspicuous and prominent position in State and national affairs.

The true physician must be clean, physically and morally; and his surroundings, his methods, and his associates must demonstrate his cleanliness. He must be active, energetic, earnest, and honest toward his patients, and he must show his skill and ability toward all classes. He must study and read and broaden his mind by contact with general subjects and association. He should be trained in business ways, in order that he may treat his patient and his creditor with fairness and promptness. He should interest himself in public and municipal affairs, and prove his fitness to discuss public questions. All of these things he may do if he will, but his tendency to systematize his methods can be accomplished only by effort. When the medical man reaches this plane he will be a power that cannot be ignored, but will he reach it?

REPORT OF COMMITTEE ON MEDICAL DEFENSE.

For the report of Drs. Schauffler, Gray and Melcher on Medical Defense and the discussion following at the last annual meeting of the Medical Society of New Jersey, see pages 121 to 124 of Supplement to the Journal, August, 1907, containing the official transactions. (It will be seen that action on this report was deferred until the next annual meeting. We give below the report of the Wisconsin Committee on Medical Defense and a communication in the Wisconsin State Journal giving the experience of other State Societies.—Editor.)

REPORT OF COMMITTEE ON MEDICAL DEFENSE OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

The committee appointed at the last meeting of the State Medical Society to draw up a plan of Medical Defense by the Society, which should be submitted to the County Societies for their consideration, begs leave to submit its report in the form of the following recommendations:

1. The Committee on Medical Defense shall consist of the President, Secretary, and Treasurer of the Society—with the twelve Councilors, who shall select from their number, or the Society at large, an Executive Committee of three—designating the chairman—and who shall also be

members of the Committee on Medical Defense. The Executive Committee shall be perpetuated by the election of one member each year. The term of service of each member shall be three years, provided that, as first organized, the service shall be determined by lot, with terms expiring in one, two, or three years respectively from January 1, 1908.

2. On or after January 1, 1908, it shall be the duty of the Executive Committee to investigate all claims of malpractice against members, to adjust such claims in accordance with equity when possible, and if, in their judgment, an adjustment is impossible, to forthwith forward all papers connected with the case received from the applicant, to his attorney; but they shall not pay, nor obligate the Society to pay, a judgment, claim or settlement against any member. It should be provided that the Committee shall have discretionary power in the selection of cases for their action.

3. The Executive Committee shall adopt rules for their guidance and for the guidance of the members of the State Society to contract with such agents (attorney or other) as they may deem necessary.

4. They shall have charge of the Medical Defense Fund, which fund shall be secured as follows:

A. Each member of the Society shall be assessed \$1.00 a year for this fund alone, to be paid with the regular State Dues, and this fund shall be subject to warrants signed by the Chairman and Secretary of the Executive Committee.

B. The Executive Committee shall at each Annual Meeting of the State Society make to the House of Delegates a detailed report of all expenses incurred, and work done during the year ending April 1, next preceding the meeting.

C. No action shall be taken by the State Medical Society of Wisconsin in reference to an act committed prior to January 1, 1908, or before the date of qualification of the accused as a member of the Society. Furthermore, no member shall be entitled to the privileges of defense by the Society whose dues to the Society are not paid in advance, as elsewhere provided in the Constitution and By-laws, and such defense shall be granted only to members residing in Wisconsin and not to non-resident or affiliated members.

(N. B.—The above was formulated at a meeting held in Milwaukee, on November 20th. It is merely the preliminary outline of a plan the details of which will be worked out by the Executive Committee.)

Communication in the Wisconsin Medical Journal.—Elsewhere in this issue can be found the report of the Committee appointed at the Superior Meeting to draw up a plan of Medical Defense to be submitted to the County Societies. Upon their decision will rest its adoption or rejection. For this reason it is necessary that each County Society shall carefully canvass the matter with the whole membership and discuss the matter thoroughly before taking action. When reporting to the State Secretary, give the exact vote on the proposition, pro and con, so that the true expression of the whole profession of the State can be obtained. Probably the only serious objection will be concerning the additional assessment of \$1.00. This will provide a fund of over \$1,500 and it may not be necessary to make another assessment for two or three years, as the

experience of other States is, that, under this plan, few or no suits ever go to trial.

For the benefit of the Societies which are to take action, it may be well to state the experience of other State Societies:

1. Pennsylvania has had a defense fund for several years (10 cents yearly per member) and believes in the plan, but has had no suits to defend. "One suit was threatened and probably the fact that the member would be defended by the Society had something to do with the dropping of the case." The Council acts as the Defense Committee and selects the attorney.

2. Philadelphia County Medical Society has a Defense fund of \$2,000 and several threatened suits have been dropped as soon as it was learned that the County Society employed one of the leading lawyers of Philadelphia.

3. Wayne County (Mich.) Medical Society has \$1,200 in the Defense fund. A few of the members object to paying the extra dollar, but Dr. Tibbitts, the Secretary, writes that the defense plan has become a fixture and that it will be continued.

4. Maryland has had Medical Defense for two years. Dr. Ruhräh writes: "So far it has worked well. We retain an attorney at a fee of \$100.00 per year—to look after any suits which may occur and should expect to pay extra if the case were far removed from Baltimore or involved an unusual amount of work. So far we have had no cases to defend, although one case has been taken up which would not come strictly within the agreement. The Council acts as the Defense Committee. The advantages of such defense is in inhibiting lawyers and others from bringing suits."

5. In the Illinois State Medical Society, Medical Defense was adopted one year ago. The Chicago Medical Society had defended its members for a number of years and the results were so satisfactory that the plan was adopted by the State Society. The entire question was referred to the County Societies, which reported in favor of the plan. The House of Delegates raised the annual dues \$1.00, the money so raised to be set apart for a defense fund. Dr. Weis, the Secretary writes: "I think you would be interested in knowing how this question has worked: first, on membership, and second, its practical utility. As to membership—our Society lost altogether about twenty-five members and has gained fully 300. This I believe to be due specifically to this feature. Those who dropped out and did not wish to pay the extra \$1.00, were mostly very old men, practically retired from practice.

On the second question, I can say that I do not believe that during the last year there has been a single case of malpractice successfully prosecuted against any of our members, but on the contrary, a great number have been successfully defended. One, I believe, was compromised and a great many more were not allowed to get into court at all. It is the cheapest kind of insurance that can be had and I believe that its chief merit lies in the fact of its prophylaxis. The Illinois Counsel receives \$1,000.00 per year and all the costs of defense are now paid by the Society, but a judgment would not be paid. Suits will not be brought when lawyers understand that a hard fight awaits them; physicians who will testify against a fellow member cannot be found, and all are willing and anxious to assist the State Society in the defense." Dr. Weis reports that the defense fund contained \$4.00 on July 1, 1906, and

\$2,060.50 on May 1, 1907. He estimates the actual cost of protection per member to be 47 cents per year.

Dr. H. N. Moyer, a member of the Illinois Defense Committee, writes: "We retained attorneys, and at first, having no accumulated fund, we undertook to meet what is known as a retainer fee. Later, as our funds accumulated, we paid court costs and then attorney fees, and we now think that we are in a position, or soon will be, to pay any judgment that may be rendered against our members."

6. New York State has had the largest and most successful experience in Medical Defense. It was adopted in 1902, and is now regarded as one of the strongest features of the State Medical Society. Dr. Townsend, the Secretary, writes: "I am convinced from the results in New York State that one of the most beneficial things a County or State Society can do is to protect its members from unjust suits for alleged malpractice. In this State the men are enthusiastic about it, and a great many retain their membership on account of this provision, while others have told us that they joined only to get the protection. It is astonishing how much easier it is to successfully defend a suit when the State Society is defending it, because all the profession feel it is their duty to go to the aid of a fellow practitioner and take an active part in assisting the Society's attorney in winning the suit."

7. Iowa, last May, adopted with enthusiasm a Medical Defense plan. Dr. Littig, of the Committee, writes me that they have had no experience as yet, since the defense applies only to suits based on acts subsequent to July 1, 1907.

8. Nebraska adopted a plan last May, but it does not go into effect till a year.

In Kansas, Arkansas and New Jersey, committees have been appointed to report at the next Annual Meeting.

From the experience of these States it is probable that the plan will be generally adopted. If the County Societies in Wisconsin to which it is submitted see fit to approve, I am confident we shall make no mistake in giving it a trial also.

C. S. S.

MEDICAL TESTIMONY.

Abstract of a Paper by Dr. S. B. Lyon, San Jose, Cal., Read Before the Santa Clara County Society.

The author calls attention to the present unfortunate and rather humiliating condition into which medical expert testimony has fallen, and points out the manner in which the average physician when placed on the witness stand is made to appear as the mere plaything of the attorneys in the case. He does not believe that this is due to the fact that the average physician knows less medicine than the best lawyer, but he believes that it is due to the fact that the average lawyer prepares himself most carefully and, on the particular points at issue, is in court a better physician than is the best physician a lawyer. In other words, the physician seldom tries to know well the relation of his profession to the law. And I therefore bring before you to-night the following points on medical testimony for discussion:

1. The scope of medical science has so broadened that none of our best colleagues can claim to-day to be a specialist of all its respective branches.

2. The principal qualification for a medical

witness that the law prescribes at present is "ordinary skill."

3. No case of medical testimony shall be undertaken before a perfect knowledge of the case is arrived at.

4. The physician and attorney of the same side of the case shall have a thorough consultation before the case comes up, in which the physician shall inform the attorney of all the probabilities of the testimony.

5. When the physician takes the witness stand he shall bear in mind three successful examinations before his testimony will gravitate the scale of justice in favor of the side he was a witness for. These examinations are:

(a) The direct examination by the counsel for the side on which he appears. In this examination, whether he is to testify as to facts he has observed as a result of an examination, or as to the expression of an opinion in answer to a hypothetical question, his answer shall be short, using plain words to express his ideas, in a loud, clear voice, and be positive in his statements as to location, measurements, dates, personal observation and opinion. No hearsay or citation of a case to be used for the support of his opinion.

(b) The cross-examination by the opposing counsel. In this examination he shall collect all his powers and control his senses, to be cool, and not to forget for one moment that he is authority himself, and is not before a board of examiners to obtain his license to practice. He shall have his attorney at his side, and on his feet to object to any question that does not pertain to the case. He shall not lower his dignity to volunteer discussion on all topics of medicine with a layman, but gently and coolly advise his cross-examiner to take a course for that in the proper place equipped for that purpose. He shall by all means ask the court to modify the answers "yes" or "no," which the cross-examiner likes to take advantage of. To any authority quoted by him by the cross-examiner, even of his own beloved great teacher, he shall consider his own authority the best.

(c) The re-examination by first counsel. This examination is either for the explanation of some variations in the cross-examination, or to enter the gates opened by the careless cross-examiner. In this examination he shall be especially careful not to introduce any new facts or theories in addition to what has been stated in the direct examination, as this would render him liable to a further cross-examination.

6. Whereas the domain of medicine, as stated in paragraph 1, has so broadened that every branch of it constitutes a specialty in itself, the medical organizations of the different states shall request their respective legislators to pass a law that only specialists in their respective branches shall be eligible to testify as experts, and shall receive a remuneration for their services, prescribed by their respective fee bills, whether called by the State or otherwise, and not as some of the States consider, that the special skill of a physician is not his personal property (Alabama, Arkansas, Colorado, Illinois, Minnesota and Texas). See A. N. Taylor, page 172.

7. All the medical societies at their regular meetings shall from time to time consider the question of medical testimony and as much as possible bring their members to accord, so as to avoid controversy with their colleagues on the witness stand. This could be brought about by the following:

(a) To promote a more fraternal feeling towards each other through the influence of the medical society.

(b) Opposite medical witnesses shall consult and deliberate upon the merits of the case before they take the witness stand.

(c) Each of us shall seek for fame mostly in the midst of our medical society, every member of which shall extend his hand of charity and good feeling to encourage and assist his colleague in every way he can.

DANGERS TO DOCTORS.

It seems that the greatest danger the doctor has to contend with is not contagious disease, or stress of weather, or the night highwayman, but that it is women, designing, malicious women, either disgraced, about to be or desiring to be. In looking over the reports of deaths of physicians comparatively few are reported to be from contagious diseases. A reputable physician of Detroit has recently undergone an experience which makes the average doctor shudder and look about for a chaperone. Dr. E. L. Emmons was called to visit a patient whom he had never visited before. He found her in a boarding-house complaining of the symptoms of a hard cold, for which he prescribed. He did not hear from her again till a week or so later, when he read in the papers that this woman had accused him of procuring an abortion on her. She was a janitress, and was found by another physician to be suffering from sepsis due to a blundering attempt to procure an abortion. Another physician was called in and the patient removed to the hospital. The prosecutor's office was notified and the assistant prosecutor and a stenographer hastened to the bedside to take the ante-mortem statement. The priest having administered the last sacrament, facing death, and in the presence of several witnesses, she said that Dr. Emmons had performed the operation, naming the time, place and fee. But she did not die. A month later the case was brought to trial, and instead of the ante-mortem statement the woman herself was on the stand. On cross-examination she broke down and admitted that Dr. Emmons knew nothing at all about the case or her condition. She said she thought that she would be sent to prison herself if she did not accuse some one. Think of the fate of Dr. Emmons had she died with this awful lie upon her lips. Laws should be passed making it a crime to solicit a physician to commit an abortion as well as to offer a bribe, and the laws should be made to better protect physicians from blackmail and accusations of this kind.—*Maryland Med. Jour.*

Luke the Physician.—Prof. Adolph Harnack, of the University of Berlin, who is known as one of the most distinguished of living critical historians of the period at the beginning of the modern era, has occupied himself not a little with various points of medical history. He is considered an authority on such matters of philology as throw light on the details of the history of Greek and Roman medicine. His historical writing has taken up much more, however, with investigation of Christian origins than with medical matters. It happens, however, that his last book is one that unites both these subjects, and competent critics have declared it to be one of the most interesting contributions to history of recent times. While in recent years some doubt has

been expressed as to the authorship of the writings formerly attributed to Luke, and even more doubt as to the tradition that their author was a physician, Professor Harnack has declared his conviction of the truth of both of these points and gives incontrovertible arguments for them. These arguments are drawn chiefly from the words and expressions which are used in the original version of the writings attributed to Luke. Careful investigation of the vocabulary and style of the author show that the tradition as to his being a physician is true beyond all doubt. The language of these writings betrays inevitably the tongue and the mind of one familiar with the Greek medicine of the time. Attention has frequently been directed to this before, but never with so rich a wealth of illustration and erudition as on this occasion. As has been well said, the argument from philology has never received such skilful treatment as is given it by Harnack. It seems probable, then, that physicians who are interested in this earlier history, especially from its medical aspects, may still continue to cherish the old tradition, according to which one of their number was in that olden time an active factor in the introduction of the ideas of the fraternity of the human race into the world which took place some 1900 years ago. "Luke the Physician," by Adolph Harnack, D. D., professor of Church History in the University of Berlin. Translated by J. R. Wilkinson, M. A. The Crown Theological Library; pp. 231; cloth; price, \$1.50. New York, G. P. Putnam's Sons, 1907.—*Jour. A. M. A.* (Nov. 30).

Reports from County Societies.

CAMDEN COUNTY.

H. H. Sherck, M. D., Reporter, Camden.

The regular meeting of the Camden County Medical Society was held in the Dispensary Building, 725 Federal St., Camden, N. J., and was called to order at 12.30, Dr. S. G. Bushey presiding. There was an unusually large attendance, many members of the profession from a distance being present. Philadelphia was represented by Dr. Eaton, vice-president of the Philadelphia County Society; Burlington by Dr. Melcher, of Mount Holly; Gloucester by Drs. Edwards, Diverty, Heritage, Stout and Halsey.

The following papers were read and discussed: "The Present Status of the Treatment of the Insane," by Dr. William A. Westcott, of Berlin. Discussion opened by Drs. Palm and Sprenger, of Camden. Owing to the unavoidable absence of Dr. Westcott, Dr. Palm read the paper for him.

"The Diagnosis of Carcinoma of the Uterine Cervix," by Dr. Thomas B. Lee.

"The Imperative Necessity for Early Diagnosis of Uterine Carcinoma," by Dr. Joseph S. Baer, of Camden.

A paper on the program on Superpubic Drainage in Hypertrophied Prostate, by Dr. E. A. Y. Schellenger, of Camden, N. J., was postponed to another meeting on account of his patient being unable to present himself at this meeting.

Dr. Westcott's paper was ably written, and the gentlemen associated with him deserve credit for the trouble they took in compiling this article. Dr. Westcott, together with Drs. Palm and Sprenger, visited a number of institutions, both public and private, within a radius of fifty miles from Camden, and were afforded unusual facilities.

ties to study the subject they presented. The paper discussed the therapy of the insane, and divided the treatment into specific and symptomatic. In the Camden County institution those affected with acute mania due to alcoholism, the treatment consists of cutting off all alcohol. A favorite treatment is the administration of hyoscine, morphia and strychnine. This is followed by tonics and in the case of anemia some of the preparations of iron are used. The study to please the appetite is also followed. In some extreme cases the stomach tube is used, but this has seldom to be repeated. In the violent cases sheets instead of straps are used to secure the patient.

At the Philadelphia Hospital for the Insane hydrotherapy is largely resorted to. To quiet the nervous system and to produce sleep, sulphonal and trional find their places in the treatment. At Norristown, Pa., they find the most prominent cause of insanity to be due to syphilis. In epileptic cases a vegetable diet is prescribed and strictly adhered to. In a large number of cases the syphilitic test is given. The doctor also made the statement that in his opinion all insane people are sick. The appearance of the skin, nails and general anemia he believes are pathognomonic. Some of the more important causes of insanity are gripe, syphilis, alcoholism and heredity. He closed by saying that character is vastly more important than wealth in the well-being of the race. Dr. Sprenger said that there is more care given to patients in private institutions than in the public asylums. This he thinks is due to the lack of funds. Dr. Smith, the physician to the Camden County Asylum, says that diversion is a very important adjunct to the proper treatment of the insane, but, as stated by Dr. Sprenger, lack of funds makes it impossible in the county or State institutions.

Dr. Lee's paper "The Diagnosis of Carcinoma of the Uterine Cervix," was next read, and was discussed in connection with Dr. Baer's paper, which followed. Dr. Lee said that irregular bleeding at the menopause was often mistaken by the laity as a cessation of the menstrual function. Virchow proved long ago that cancer of the cervix was a purely local disease, and that the involvement of the lymphatics occurs much later than in cancer of other organs. Diagnosis is of the utmost importance. The following points should be taken into consideration: Family history, patient's history, microscopical examination, severe lacerations of the cervix. The disease is rare in virgins. Age 30 to 70 is most common, but the age of the tissues is of more importance than the age of the patient. Symptoms: Hemorrhage occurring after sexual intercourse; prolongation of the menstrual period; profuse bleeding in later cases very important.

Dr. Baer's paper, "The Imperative Necessity for Early Diagnosis of Uterine Carcinoma." Of two hundred cases seen in nineteen years of practice, only two are living, except two that have been seen recently. Women will not consult their physicians until too late. Any abnormality at the menopause should receive attention. He believes that all uterine tears should be operated upon. Discussion: Dr. Alex. Marcy, Sr., cited a case of uterine cancer in which the only symptom manifest was a slight bleeding after coitus. A microscopical examination revealed the presence of cancer. An operation was suggested and after five years the patient remains perfectly healthy. Dr. Lippincott insists on repairing all tears at

an early date. Dr. Stevenson thinks that heredity has very little to do in the causation of cancer, but thinks that climate may play a more important part than is now thought. Others who took part in the discussion were Drs. Sherk, Richardson, Godfrey and Sprenger.

The Board of Censors recommended the following gentlemen to be ballotted for for membership at the next meeting: Drs. Edward Parry, Thomas B. Lee, Ernest Hummel and Samuel B. English.

Dr. Daniel Garrison, formerly of Salem County, N. J., was received into membership on recommendation of the Board of Censors. Dr. Albert Davis, of Camden, was elected a member of the society.

After adjournment the society partook of its usual dinner, the toothsome Jersey turkey forming a prominent part of the menu.

GLOUCESTER COUNTY.

Howard A. Wilson, M. D., Reporter.

The regular meeting of the Gloucester County Medical Society was held November 21 with a good attendance. Dr. L. M. Halsey read an interesting paper upon "The Early Diagnosis of Pulmonary Tuberculosis," which was discussed by Drs. C. P. Noble, of Philadelphia; C. W. Wilson, of Vineland; E. Stites and J. H. Moore, of Bridgeton, and C. S. Heritage, of Glassboro.

The report of an epidemic of diphtheria in Woodbury led to a lengthy discussion as to the relative merits of large and small doses of antitoxin, showing that the members are about evenly divided on the subject.

Dr. W. G. Simmons, vice-president of the Society, having removed from Swedesboro to Brooklyn, N. Y., presented his resignation, which was accepted. Dr. E. T. Oliphant, of Bridgeport, was elected to fill the unexpired term.

Dr. J. Harris Underwood, of Woodbury, was unanimously elected to membership.

Woodbury, N. J., Dec. 18, 1907.

The Physical Reconstruction of School Children by Means of Fresh Air.—Linsly R. Williams calls attention to the fact that the New York Board of Health has records of examinations of nearly 200,000 children from five to fifteen years of age, which show the following defects: 60 per cent. undernourished, 66 per cent. need medical and surgical care, or better nourishment, 40 per cent. need dental care, 38 per cent. enlarged cervical glands, 31 per cent. defective vision, 18 per cent. enlarged tonsils, 10 per cent. postnasal growths. Facts in regard to school inspection are given to show the marked need of fresh air agencies, which exists in every large city. The entire value of the fresh-air home depends upon its character, and he explains this by giving a brief description of Sea Breeze at Coney Island. To obtain the best results for school children certain important principles must be maintained. To preserve the family as a unit, in order to teach the mother; to visit the family in its home; to ascertain its special needs, and to exclude contagion; to examine each child in order to advise properly the best thing for its health, for treatment, before, during, and after its stay; to follow up, after their return to their own homes, those children who may be sick or in need; and, finally, to maintain even at increased cost and apparently diminished usefulness the highest standard of efficiency.

THE JOURNAL

OF THE

Medical Society of New Jersey.

JANUARY, 1908.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

The editor sends greeting to every reader of THE JOURNAL, wishing him or her a very

Happy New Year

in personal and family life, in professional work and in the service of humanity.

LOOKING BACKWARD AND FORWARD.

The past year has been one of marked advance in the science and art of our profession. We believe the standard of professional life and scientific attainment has been advanced in our State and that the profession has been partially aroused to a realizing sense of need in correcting the errors of the past concerning our ethical relations to each other and our duties to the public, insurance examiner's fees and the welfare of the inmates of our State institutions. Our State Society and most of our county medical societies have given evidence of quickened life and desire for better work; the warfare waged against tuberculosis has been carried on vigorously, with the new State Sanatorium opened and many local sanatoria, either completed or in process of construction. The Pure Food and Drug campaign and the efforts by our profession for the protection of the public against incompetent practitioners have borne fruit, and the public has recognized the profession as never before in calling a large number of its members to official positions.

We believe with a united profession, seeking to maintain the dignity which properly belongs to it, by exhibiting self-respect and devotion to the interests of its patients and the public, recognizing our profession as a *sacred calling* rather than a mere money-making business, we shall enter upon the work of the new year—1908—with the confident assurance that it will be one of marked advance and unexampled prosperity, as the signs of the time give promise of great advance in scientific knowledge and its achievements.

We add to the above a few words concerning THE JOURNAL. We have sought to make it, during the past year, a better journal. While we very deeply appreciate the many complimentary words that have been spoken by friends and printed in other medical journals, we have not succeeded in making it all we desired. May we be pardoned for adding—partly because so few of the members of our State Society have recognized their duty and privilege to help make it all it ought to be. We return our heartfelt thanks to the many who have helped us, and so assisted in the endeavor to make THE JOURNAL worthy the society whose honored name it bears.

We have deeply regretted the necessity which compelled us at times during the year to take a strong position in commenting on the neglect or abuses which we believed compromised the profession and did violence to our scientific knowledge and the public good. It deeply pained us that warm personal friends have felt aggrieved, but our position was taken from a deep sense of duty toward the profession and the public, and in the advocacy of what we believed to be scientific accuracy. We did not believe there was intentional wrong-doing, but there has been, with good men, the acceptance of public positions without that deep sense of personal responsibility which should lead to close attention to the duties imposed by official position. Our insurance companies, railroads, banking institu-

tions and trust companies have suffered from this cause and its accompanying "graft." It has not been charged that graft entered into the neglect by any of our professional men in our State institutions. The probing and the knife have been helpful even though it went deep and was painful, but it means better health, and the outlook for 1908 is far more hopeful. We all have our failings—"Tis human to err"; we have learned some lessons; we will be better men, and the profession and the public will reap the benefits.

THE NEXT ANNUAL MEETING

It is not too early to call the attention of our members to the next annual meeting of our State Society, and to begin preparation by giving thought how to make it the best meeting our Society has ever held. To that end we venture a few suggestions. First in importance, we believe, is to shorten the time of the business sessions in order to give the scientific work of the Society the time its importance demands and should receive, with a sufficient number of good, practical papers and sufficient time for their discussion—and the discussion should be as concise and practical as the papers. We do not favor the meeting of the House of Delegates at the same hours that the Scientific Sessions are held; all should be interested in and attend the latter. The Business Committee and the Board of Trustees should present the business matters so clearly that long discussions could be avoided, and new items presented, likely to call forth much discussion should be referred to them before action is taken. We have invited discussion in *THE JOURNAL* of the Medical Defense scheme, for the purpose of saving much time of the annual meeting.

Second: We urge that the sessions of both bodies begin promptly at the hours designated whether there are ten or a hundred present. We submit it is not creditable to the profession to neglect the scientific work for the gratification of social desires. We do not underestimate the value of the social functions of the annual gathering,

but there is time enough for their enjoyment. We favor the annual banquet.

Third: We venture the suggestion that at the next annual meeting there be held a conference of the county society secretaries, and possibly the reporters also, and that an effort be made to have every such officer attend. The county societies' efficiency and success are essential to the highest welfare and influence of the State Society and the the scientific advancement of the profession, and the attainment of these ends is largely dependent upon the efficiency and fidelity of the secretaries. We will not enlarge upon this at present, but suggest to Dr. Strock, the efficient secretary of the Camden County Society and editor of its excellent little journal, to consider the proposition and work it up if deemed advisable by him and other efficient secretaries.

In conclusion, with the above, it is suggested that members of the profession in the State who desire to read papers at the annual meeting next June, at Cape May, notify Dr. E. J. Marsh, Jr., chairman of the Committee on Scientific Work, Paterson, N. J., at their earliest convenience. While we always expect our older members, with their long and valued experience, to take part, our younger members who are actively engaged in scientific study and work—many of whom have not heretofore taken part—are especially invited to prepare papers and communicate early with Dr. Marsh the fact of their willingness to do so. We again call attention to the Prize Essay offers for essays on "Feeding During the First and Second Years of Infancy." The importance of this subject should call forth papers from a number of competitors.

In reference to our Society's undertaking the Medical Defense of its members who are threatened with prosecution as the result of alleged carelessness in the treatment of cases, we refer to the report of the committee which appeared in the Supplement to the August issue of *THE JOURNAL*, to the report of a similar committee of the Wisconsin State Society and a communication

thereon, on page 313 and to communications under the head of Correspondence in this issue of *THE JOURNAL*. We will not enter, at this time, on the discussion of this question, but our present conviction is, that if our State Society adopts the scheme it should not be allowed to increase the business and consume the time of the annual meeting. The work might be committed, with power, to the Board of Councilors, with the provisos: (1) That it should not involve the Society's treasury, and (2) that in cases of grave doubt the judgment of the Board of Trustees should determine their action. The Councilors should present a detailed report to the State Society each year for information and as a matter of record.

JOHN C. JOHNSON, M. D.

It is with deep sorrow we announce the death of Dr. John C. Johnson, of Blairs-town, on December 23. He was the oldest living Fellow of the Medical Society of New Jersey, having been elected president in 1867; the eighteen presidents who in successive years followed him have been deceased for several years, leaving Dr. C. J. Kipp, of Newark, elected in 1886, the oldest now living. Dr. Johnson has been a practitioner in Warren County for about 58 years. He was one of the most faithful members of the State Society, regular in attendance at the annual meetings and universally esteemed. He was a wise counselor, able and greatly beloved physician and a true Christian gentleman. We shall deeply miss him. This sad news came just as the issue of the *Journal* was being completed for the press. An obituary, with a cut of the doctor, will appear in our next issue.

It is with deep regret that we note the severe and prolonged sickness of our esteemed Fellow, Dr. William Elmer, of Trenton. We know that we voice the feeling of our entire membership in extend-

ing to him our sympathy and expressing our hopes for his speedy restoration. We are glad to report his condition as much improved.

TYPHOID FEVER EPIDEMICS.

The epidemics of typhoid fever at Roeb-ling, Trenton and Burlington with 70, 85 and 35 cases respectively, would seem to point to the Delaware river water as the source whence they came. They emphasize anew the need of great care in the selection of the sources whence come the water supplies of our cities and in protecting the water from contamination after its introduction, even when filtration plants have been introduced. Trenton has wisely appointed a commission of competent men to study the situation there and recommend remedial measures.

There has been a marked and steady reduction in the death rate in our State from typhoid fever during the past fifteen years, or since the introduction of public water supplies in our cities. The increase in the number and extent of epidemics in our State and elsewhere during the past year or two leads to the query whether carelessness in the management of these water supplies and filtration plants is not chargeable to a considerable extent with this increase.

We regret to chronicle another uncalled for indignity toward a worthy member of our profession who has rendered most efficient and faithful service—that to Dr. William H. Hicks, first assistant physician and pathologist at the Essex County Hospital for the Insane, by the Board of Freeholders. The reason as reported in the *Newark Evening News* (see article in another column) would seem to add insult to injury. It is high time that public officials ceased to trifle with the highest, most sacred, interests of the sick and unfortunate wards of the State and with the good standing of the institutions which have been established for their benefit, as well as the good reputations of their medical officers.

We congratulate Dr. Hicks and Essex County on the outcome of the struggle—his retention in office, especially that qualification, rather than favoritism and petty suspicions, has determined the question of his continuance in office.

An article on Contract Practice, taken from the *Journal of the American Medical Association*, will be found in this issue of our JOURNAL. It is worthy the careful study of every physician, as it seems, from our hasty reading of it, to wisely consider every phase of this method of practice.

George F. Shrady, A. M., M. D.

In the death of Dr. George Frederick Shrady in New York city, November 30th, our profession has lost one of its ablest men who had achieved a world-wide reputation, not only as a skilful, conservative surgeon, but also as a model medical editor. When President Garfield was shot he was consulted as pathologist and presented to the profession and the public an able surgical and pathological report of the case. He was one of the surgeons in attendance on General Grant during his last illness, and when Emperor Frederick of Germany was suffering from an apparently similar throat affection Sir Morell Mackenzie sought an opinion by cable from Dr. Shrady. He was visiting or consulting surgeon to several hospitals, including the Hackensack Hospital in this State, and was one of the managers of the Hudson River Hospital for the Insane.

He began his editorial career with the *Medical Times* in 1860, serving that paper four years. In 1866 he founded the *Medical Record* and continued as its editor-in-chief for thirty-eight years, serving with indefatigable energy and marked ability. He also served on the editorial staff of the New York Herald, writing chiefly on matters of medical or surgical interest. He had been president of the New York Pathological Society, the Practitioners' Society of New York, and the American Medical Editors' Association, and was a member of several other medical societies and clubs. Dr. C. L. Dana, in closing a deserved tribute to his memory, well says: "He was always a lovable man; he grew more so in his age, and it is pleasant to know that in his last years he lived a happy life, and died with the

knowledge that he had troops of friends to lament his loss and comment upon a life which gave out much of happiness and was filled with such real achievement."

The busy holiday season has compelled us to prepare this issue earlier than usual in order that it may reach our readers on time. Consequently the insertion of some able papers read before County Societies and other matter has been deferred until the next issue of our JOURNAL.

THE NEWARK MEDICAL LEAGUE.

The Newark Medical League invited the medical profession of Essex County to a lecture by Dr. Willy Meyer, of New York, on "Bier's Hyperemic Treatment," given at the regular meeting of the league on December 9, 1907, in the parlors of the Continental Hotel, 452 Broad street, Newark. Many physicians from various parts of the country were present. Dr. Willy Meyer read two papers: The first on "Acute Mastitis," representing the acute diseases in which Bier's method may be used; the second on "Tuberculosis of the Knee Joint," showing the use of Bier's method in chronic diseases. In addition he mentioned many diseases of acute and chronic type, and explained in a very instructive manner how Bier's method may be applied. He laid stress on the point, however, that Bier's treatment was not a panacea. He showed suction glasses of various sizes and shapes used in mastitis. He also explained the attempt made to cure tuberculosis of the lungs by Bier's method, and showed a mask made of celluloid, invented by one of Bier's assistants, to be worn for that purpose over the nose and mouth. His lengthy preliminary talk was also very interesting. At the end of his lecture, which began at 9 and ended at 11 o'clock P. M., he was given a standing vote of thanks by the audience.

Dr. Willy Meyer was escorted into the dining room, where a dinner was given by the league in his honor. After the dinner he illustrated on one of the members, offering himself as a subject, the application of the rubber band on the arm and the use of cups in Bier's method. It was 1 A. M. when Dr. Meyer was taken to the train for home.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM NEW JERSEY.

Burt, Fredrick C., Hammonton.
Funkhauser, Edward B., Trenton.
Kimball, Paul T., Lakewood.
Meacham, Eugene A., South Amboy.
Weeks, David F., Skillman.

NEW MEMBERS OF OUR COUNTY MEDICAL SOCIETIES.

Camden County—Drs. Albert Davis and Daniel Garrison, of Camden.
Gloucester County—Dr. J. Harris Underwood, Woodbury.
Middlesex County—Dr. Eugene A. Meacham, South Amboy.

Correspondence.

REPORT OF THE MEDICAL DEFENSE COMMITTEE.

To the Editor of The Journal:

Dear Sir—In reply to your letter asking my reasons for opposing the adoption of medical defense in our State Society, I would say that I think we are agreed that we are all liable at times to be threatened with prosecution, and that we should take measures to protect ourselves against blackmail. The only difference between the committee and myself is as to how the protection shall be afforded. I am a specialist, and as such believe I am better prepared to take care of the cases which come within my scope than is the general practitioner. Having limited myself to certain lines of practice I am, of necessity, not qualified to give an opinion in other lines, and the practitioner who knows it all is pretty sure to know nothing; therefore, I feel that a medical society whose business it is to devote its entire time to medical matters cannot properly become a liability insurance company and successfully cope with the well-established companies of that character now in existence.

In the second section of the committee's report they say that the Council of the Society shall select annually as counsel some well-known lawyer in the State of New Jersey qualified to act as such and retain his services at a proper fee. It goes without saying that unless one of the best lawyers in the State was selected the Society would not be satisfied, and the "proper fee" for one of the best would be out of all proportion to that received by any member of our Society. Lawyers, unlike doctors, expect pay for the use of their names; and the next section says "the necessary expense so incurred be paid from the Society's treasury." I do not want to feel that I must accept the so-called protection of a company in which I have no faith.

My experience with good physicians is, they are poor business men, and the physician who is endowed with business ability is warped in his judgment on medical cases, because he looks at it from a commercial point of view.

It requires no further argument on my part to set forth my reasons why I am opposed to a medical society endeavoring to do the work of a liability insurance company. I congratulate the members of the committee upon their report, and if they can make a contract with one of the well-established companies, for a less fee than they now charge, I should be glad to avail myself of the advantages of such a contract. Yours truly,

NORTON L. WILSON.

Elizabeth, N. J., Dec. 7, 1907.

To Amend Illinois Medical Law.—The Illinois State Board of Health has prepared a bill providing that the board in its discretion may admit to examination any candidate who has completed four annual sessions or terms in a medical college in good standing, and who has passed the examination of said college. Those who pass can obtain temporary licenses good for eighteen months. On completing this period, a regular license may be issued if the applicant presents a diploma from the medical college in which he completed the session of the fourth year and if he otherwise complies with the requirements of the State Board.

DR. HICKS'S RETENTION.

Editorial in the Newark *Evening News*, Dec. 17.

The peculiar course pursued by some of the freeholders in considering the resignation of Dr. William H. Hicks from the staff of the county asylum has been entirely accounted for by the developments before the Hospital Committee of the Board of Freeholders. There was but one reason why some of the members were anxious to have the resignation accepted, and that was because they feared Dr. Hicks would be a candidate for the superintendency when the term of Dr. Daniel M. Dill expires next spring. It was only when Dr. Hicks had let it be known that he did not want and would not accept the position of superintendent that the committee members got together, agreed to grant the doctor a vacation of three months, to be spent in study in Europe, and to keep his place open for him until his return. This committee action was unanimously approved by the Board of Freeholders, and thus a nasty bit of official scheming, in which personal interests were considered of more importance than the welfare of the county insane, was brought to an end.

Dr. Hicks has had a remarkable record during his long years of service at the South Orange avenue hospital. He has become recognized all over the country as an expert in the treatment and care of the insane. He has been faithful in the discharge of all his duties, and there has been no charge ever brought against him of incompetence, inattention or dereliction. Yet there were members of the Board of Freeholders who were willing to dispense with his services to further their own personal and political ends. It is fortunate that these men failed in their purpose and that Dr. Hicks will continue to serve the county in spite of their machinations.

THE FRANCIS E. PARKER HOME FOR INCURABLES.

At New Brunswick, N. J., Opened November 23, 1907.

(From the New Brunswick *Home News*.)

Patients were received to-day in the Francis E. Parker Memorial Home on Easton avenue. This hospital is one of the best appointed and equipped institutions of its kind. It is situated in a most picturesque locality, away from the noise of the city, but within easy access.

Its natural surroundings are very attractive, and when the newly-planted trees and shrubbery begin to grow, will be an ideal spot for the sick to rest and regain their health.

The home is intended for the admission of those suffering from incurable diseases, as well as for convalescents who have been treated in hospitals, and not having places to go where they can be properly cared for, may here recuperate until well. It is also a training school for nurses.

The building is a most substantial and well-finished structure, every detail being of the best, the knobs of the doors are glass, and every precaution has been taken to make the equipment as sanitary as possible. The center is two stories. The first floor has a large hall from the main entrance with corridors to the public wards. The office, two rooms for nurses, dining room, kitchen and pantry, are located so perfectly that the work of each department will be greatly facilitated.

On the north and south sides of this building are two large one-story wards, one for men and

the other for women. These rooms are bright and cheerful, and each bed is equipped with an electric signal designating its number in the nurses' room. At the end of each of these wards is a sun parlor.

In the cellar are two of the most modern steam heating boilers, one being sufficient to heat the place, and the other held in reserve in case of accident. There is also a laundry here.

The medical staff is: Dr. H. H. Janeway, chairman; Dr. B. Guttman, Dr. A. L. Smith, Dr. James P. Schureman. Miss McCarthy is superintendent.

Honorary Board of Physicians: Dr. L. D. Bulkley, Dr. Egbert LeFevre, Dr. A. A. Smith, Dr. Ruel B. Kimball, all of New York.

ST. PETER'S HOSPITAL, New Brunswick, N. J.

St. Peter's General Hospital was formally opened for the reception of patients on November 11, 1907, at New Brunswick, N. J. The building is beautifully situated on Somerset Street, near its junction with Albany Street, and consists of two large wards for male patients, each one holding seven beds. Two wards for women, each containing seven beds. Also one ward for children. On the same floor is an operating room, thoroughly equipped, a sterilizing room with all the modern apparatus, an X-ray room and an etherizing room. The second floor is made up entirely of private rooms of which there are ten and one semi-private (3 beds). The third floor is occupied as quarters for the nurses.

The institution was organized by the Rev. Monsignor O'Grady, to whom all credit is due. It is presided over by the Gray Nuns, who are skilled in the art of nursing. The Medical Staff is composed of Dr. Frank M. Donohue, president; Dr. F. E. Riva, secretary; Drs. Chas. V. Butler, W. E. Condon, J. W. Rice, Pat'k A. Shannon, and Dr. B. F. Howley, special.

During the six weeks since it was opened twenty-six patients have been received, twenty major operations have been performed, including 1 cholecystectomy, 1 cholecystotomy, 3 appendectomies, 2 Alexander operations, 2 laparotomies for cystic disease of ovary and disease of tubes, 2 uterine and 1 rectal polypi, 1 laparotomy with perinaeorrhaphy for procidentia uteri, 1 nephrorrhaphy, 1 case of removal of submaxillary and sublingual glands in cancer of the lip, etc. There have been no deaths.

A LETTER BY DR. BENJ. RUSH, 1810.

Dr. C. H. Todd, of Owensboro, Ky., read a paper before the Davies County Medical Society, from which we give the following, taken from the *Kentucky Medical Journal*, November, 1807:

I have a letter written 96 years ago by Dr. Rush, giving medical advice to a patient, which I think would be of interest to the society, and therefore ask permission to read it. I will first give a brief sketch of Dr. Rush, which will add to the interest of the letter.

Dr. Benjamin Rush, the Sydenham of America, was born in 1745 near Philadelphia, graduated in medicine in Edinburgh in 1768, and after spending a year in the hospitals of London and Paris, located in Philadelphia in 1769, at the age of 24 years, taking the chair of chemistry in the new medical college organized that year.

He at once became a leading spirit in the polit-

ical and social movements of the day. He was the secretary of the first anti-slavery society organized in America in 1774. He was a close friend of Benjamin Franklin, a member of Congress from the State of Pennsylvania in 1776, and one of those who signed the Declaration of Independence the same year. When the political crisis ended in 1787 with the convention for drawing up a Federal Constitution, of which he was a member, he withdrew from public life and gave himself up wholly to medical practice. In 1791, when the medical college, which he had helped to found, was absorbed by the University of Pennsylvania, he became the professor of the theory and practice of medicine in that institution. During the thirty years that he attended the Pennsylvania Hospital as visiting physician, he never missed his daily round, though he was a frail and delicate man:

Philadelphia, December 31st, 1810.

Dear Sir:—

A diseased liver generally brings the stomach into sympathy with it. It will be proper, therefore, to direct our remedies primarily to remove the cause of the distressing symptoms you have described in Mrs. B.'s stomach. The most powerful remedy for this purpose is calomel, a grain, or half a grain of which, should be taken three times a day, restrained, if necessary from purging by a small quantity of opium. This medicine should be continued until it touches her mouth, then laid aside until her mouth is well, and then resumed and laid aside two or three times while there is any reason to believe the obstruction in her liver continues to affect her. In the meanwhile, the distressing symptoms of her original disease as they appear in the stomach, should not be neglected. The remedies proper to relieve them should be palliative and radical. The former should be magnesia—the sal soda—a mixture of equal parts of lime water and milk, a tablespoonful of which should be taken at any time when she is troubled with acidity, puking, or sickness, every hour until she is relieved. From ten to twenty drops of laudanum taken just before she sits down to her meals will probably enable her both to retain and digest her food. Ginger tea often relieves all the uneasy symptoms of diseases of the stomach. A teaspoonful of the fine powder of charcoal taken daily is both a palliative and radical remedy in stomach complaints. The radical remedies should be solid food taken at short intervals and in small quantities, and with as little drink as can be patiently submitted to with it. It is a curious fact that food somewhat difficult of digestion often relieves a diseased stomach more than that which soon passes out of it. Let beef, mutton, wild fowls, venison, fish, oysters, salted meat, salted fish all be tried in succession and alternately, and but one at a time. Dry bread, or toasted bread, or biscuit should be taken with them, and no other matter of a vegetable nature. If all these articles of diet disagree with her, let her try rennet whey, well-boiled turnips or potatoes, and any or all of the different kinds of mush, and above any of them rice in all the different forms in which it is usually prepared for the table. Toast tea should be taken if agreeable to her, as her chief drink. Perhaps a little porter and water, or claret and water may not be offensive to her stomach. To assist this diet, she should take some of the preparations of iron. Five grains of the rust of this metal mixed with five grains of ginger may be

taken three times a day with her calomel. They will not interfere with its operation. If this be offensive to her stomach, try five grains of tar made into two or three pills with a little flour three times a day. If this medicine be not well received by the stomach, try the nitric acid diluted with water so as not to be unpleasant to the taste. The bowels should be kept gently open. The tincture of rhubarb will be the best medicine for this purpose.

Quiet exercise should be continued, but never to such a degree as to induce fatigue to the body or mind.

Have blisters been applied to her side? They are sometimes useful in diseases of the liver. Great care should be taken to guard her against taking cold by dresses suited to the changes of the weather.

With sincere wishes for the success of the above prescriptions, I am, as ever,

Very respectfully yours,

BENJAMIN RUSH.

P. S.—My usual fee for a letter of advice is ten dollars.

Current Medical Literature.

Childbirth After Uterus Has Been Cut Off from Central Nervous System.—Kruieger and Offergeld, in *Archiv. für Gynakologie* (Berlin), report two cases in which there was painless spontaneous delivery at term after a fall from a height which had evidently severed the spinal cord. In the second case the woman was delivered of twins. All the children were living. Both the women succumbed soon to the complications of the accident—pyelonephritis or suppurative meningitis. After this experience extensive experiments were undertaken on dogs, cats and rabbits to observe the processes of conception, gestation and delivery after the uterus had been completely cut off from the central nervous system by severing the spinal cord. The results confirm the independence of these natural processes in respect to the brain and medulla oblongata.

Pregnancy and Heart Disease.—Wenczel (*Monatsschrift für Geb. und Gynakologie*, Berlin) does not object to the marriage of a young woman with heart disease if compensation is unimpaired and if there are no other serious complications, such as kidney disease or contracted pelvis, and if the young woman is in good circumstances. There is well-founded hope in such a case that childbearing will not be dangerous to life. Under other conditions he advises against it. If such a woman becomes pregnant the outlook is more favorable if she is young and if it is her first child; the myocardium is liable to be in better condition than in case of a multipara, although the latter has the advantage of easier delivery. The prognosis is most serious in an elderly primipara. Failing compensation should be combated by rest in bed and heart tonics, with artificial interruption of the pregnancy as the last resort. After the placenta has developed, in the third month, there is danger of considerable hemorrhage during this and the fourth month, the uterus not contracting and retracting regularly at this stage of pregnancy, and the hemorrhage is liable to be severe, the placenta clinging tenaciously to the uterine wall. Beginning with the fifth month, the conditions are more like that

of normal term delivery and the hemorrhage is generally less. Much impaired compensation is noted during the first half of pregnancy in women whose heart functionated defectively in previous pregnancies, while with well-compensated heart disease the disturbing symptoms do not appear generally until the second half of pregnancy. He describes the details of eight cases of severe heart disease in pregnant women. In four cases the women had suffered for years from serious heart trouble, and they all succumbed. Two women with mitral insufficiency passed safely through the pregnancy. One was delivered hastily nearly at term with the metreurynter on account of the menacing heart symptoms which had developed during the second half of the pregnancy. Relief was apparent at once. The other patient was spontaneously delivered, caffeine and digitalis being given regularly during labor on account of the bad pulse. Both these patients recovered compensation and left the clinic in nine and ten days with living children. Mitral stenosis seems to be exceptionally dangerous; none of his patients with it recovered, and the patient with aortic insufficiency also succumbed.

Appendicitis and Pregnancy.—Calmann remarks that appendicitis is exceptionally grave for the fetus; it either succumbs to infection or to the interruption of the pregnancy. There is also danger for the mother in the close vicinity of the uterus in a peculiarly receptive condition. Septic endometritis, abscesses and perforation are liable to be the result. He reports three cases; in the first the pregnancy continued undisturbed by evacuation of a pyoappendix at the fifth month. In the second case the pregnancy was interrupted at the seventh month on account of beginning peritonitis from appendicitis. In the third, an operation for recurring appendicitis did not interfere with the pregnancy at the seventh month. Appendicitis during the puerperium has the same indications as at other times, with the single exception that the appendicitis may interfere with the involution of the uterus, the natural process being suspended under its influence. He reports two cases of this kind, the persistence of the lack of involution compelling appendectomy, after which the natural process proceeded normally.—*Jour. A. M. A.* (Nov. 30, 1907).

Indirect Production of Typical Pain at McBurney's Point.—Rovsing, in *Centralblatt für Chirurgie* (Leipsic), has found that pressure on the corresponding point on the left side will elicit the typical pain at McBurney's point in case of appendicitis, but not with other abdominal affections. His attention was attracted to this by two patients who entered his service the same day under the diagnosis of acute appendicitis. In each the right iliac fossa was so sensitive that he did not venture to test McBurney's point for fear of doing further injury, and the idea came to him to test the corresponding point on the left side. In one patient this elicited intense pain at McBurney's point, the intense pain occurring with lightning rapidity at this point when compression was applied to the middle of the descending colon. In the second patient, although the right side was so sensitive, compression of the left side did not elicit any pain at McBurney's point, even when vigorous pressure and massage were applied to the descending colon. The operation showed the appendix and vicinity entirely sound while the trouble was found to be a retroperitoneal effusion and perirenal phlegmon.

Testing this indirect means of eliciting the pain at McBurney's point on more than 100 patients during the two years since has confirmed its differential value; it was never found unless there was some affection of the cecum or appendix.—*Jour. A. M. A.*

Idiopathic Hemorrhage from the Kidney.—Steinthal, in *Beitrage zur Klinischen Chirurgie* (Tubingen), reports the case of a young woman with a slight apical tuberculous process who suddenly had a hemorrhage from the left kidney, recurring on the following days. The bladder was seen to be normal and the indigo-carmin test showed the right kidney working normally while the left seemed to be halting at times in its work. On suspicion of a tuberculous process in the kidney, it was exposed, but seemed to be normal except at one point, which was slightly congested. The kidney was restored to its place and tamponed, but after five days the patient complained of such pain in the region that the tampons were removed, when the hemorrhage from the kidney recurred; it was so violent and uncontrollable that the kidney was removed at once. During the following days a number of blood clots had to be removed from the bladder, but the further course was favorable and now, a year later, the patient is in excellent health. Examination of the extirpated kidney failed to reveal anything pathologic. He remarks that this makes the sixth case on record of idiopathic hemorrhage from the kidney in which nothing could be discovered to explain the hemorrhagic tendency.—*A. M. A. Jour.*

Sprains.—Bennett, in *British Med. Jour.* (Dec. 8, 1906), discusses sprains and their consequences. He divides them into three classes: 1. Simple sprains, involving the soft parts only. 2. Sprains complicated with fracture, the symptoms of which are so slight as to make it undiagnosable under ordinary circumstances, the symptoms of sprain being predominant. 3. Sprains with gross nerve injury. Speaking generally, a sprain may be considered as a subcutaneous laceration. The first essential in all cases is to determine whether fracture coexists; this can readily be done by means of the X-ray if they are available. The view that absence of crepitus means absence of fracture is a sadly mistaken one, and often leads to disastrous consequences. The next desideratum is to eliminate the existence of gross nerve lesion. Should the pain be referred to a distant part, definite nerve lesion is indicated. In every case the distal parts should be examined for numbness. In sprains without swelling (so called "sprains") the pain may be intense. Rest of the part, combined with firm compression, is usually effectual; such compression is best applied by means of strapping. In sprains with immediate swelling (from blood) the indications are: (a) Arrest of bleeding; (b) promotion of absorption of extravasated material; and (c) prevention of adhesions and muscle waste. As regards bleeding, rest is the only form of local treatment that has any effect. Heat and cold, while promoting the comfort of the patient, do not check swelling. Absorption is best promoted by pressure, such as that provided by a firm porous bandage, followed by massage, which latter in conjunction with passive movements, also prevents adhesions and muscle waste. In cases with fracture, voluntary movements must be postponed. In cases with nerve injury, and pain along the nerve, rest and rest only will bring about complete and

permanent cure. When numbness is the result of the nerve injury, massage and galvanic electricity are indicated, and exercise encouraged. The later consequences of sprains are: 1. Preventable; (a) persistent pain; (b) stiff joints; (c) wasting of muscles (apart from gross nerve lesion); (d) general relaxation of joints; and (e) deformity. 2. Unavoidable in certain cases; (a) osteoarthritis; (b) local paresis; and (c) myositis ossificans.

Surgical Suggestions from the American Journal of Surgery.

Bleeding after coitus is sometimes the earliest sign of cancer of the cervix.

An obstinate constipation may be due to an extreme retroflexion of the uterus, the organ lying in the hollow of the sacrum.

Hypernephroma is distinguished from the other malignant tumors of the kidney by the very early appearance of hematuria.

A retropharyngeal or peritonsillar swelling that is very edematous will often disappear under the administration of large doses of aspirin.

A small, hard, tender nodule situated over the thenar or hypothenar eminences may be a broken-down dermoid cyst.

The presence of a tumor of the sigmoid flexure with symptoms of chronic obstruction does not always indicate a cancer. Such a condition may be due to a "diverticulitis."

When a patient gives all the signs and symptoms of appendicitis, if the stools have been noticeably black, a duodenal ulcer should be kept in mind.

A boggy, tender abdomen is often suggestive of a pneumococcus peritonitis. A careful inquiry as to a previous pneumonia or empyema is most important.

The presence of an indefinite mass in the abdomen of a child running intermittent temperatures may mean a tuberculosis peritonitis.

Too frequent enemata before operation may be productive of a great deal of post-operative distention.

Post-operative acute intestinal obstruction in rare instances has for its causation an interstitial hernia through the abdominal wall. A mass composed of confined gut is usually present.

In cases of strangulated hernia a simple enterostomy after cutting the neck of the sac will often save a life where a prolonged operation would result in death.

Marriages.

HALSTED-VOORHEES.—At Somerville, N. J., November 20th, Dr. Charles F. Halsted to Miss Elizabeth H. Voorhees, both of Somerville.

THOMAS-HUNT.—At Lambertville, December, Dr. F. Ashley Thomas, of Flemington, to Miss Edna May Hunt, of Easton, Pa.

Obituaries.

DR. CHARLES H. BAILEY.

Dr. Charles H. Bailey, for thirty-seven years a physician of Bloomfield and up to two years ago president of the staff of Mountainside Hospital, Montclair, died at his home in Bloomfield, December 10th, from paralysis.



DR. CHARLES H. BAILEY.

Printed by Courtesy of the Newark (N. J.) News.

Dr. Bailey was born in Catskill, N. Y., September 30, 1844, being a son of the late Alexander Hamilton Bailey, a lawyer. When Roscoe Conkling, who represented the Utica district in Congress, was elected to the United States Senate, the elder Mr. Bailey became his successor and represented the district for four years.

At the age of eighteen years Mr. Bailey enlisted in the One Hundred and Seventeenth Regiment, New York Volunteers, as a private, and at the close of the war received a commission as first lieutenant for gallantry in action. He began his medical career in the College of Physicians and Surgeons in New York, and in 1870 moved to Bloomfield, where he became assistant to the late Dr. Joseph A. Davis, and later opened an office of his own.

When the Mountainside Hospital was organized, twenty years ago, Dr. Bailey became a member of its medical and surgical staff and until recently was a consulting physician. He succeeded Dr. John J. H. Love as president of the medical and surgical staff, but resigned in 1905, on account of failing health.

Dr. Bailey was a member of the New Jersey State Medical Society, American Medical Association, Orange Mountain Medical Society, and was past master of Bloomfield Lodge of Masons. He was also a former president of the Board of Health, and at the time of his death was a member of the old First Presbyterian Church.

LOOMIS.—Dr. Henry Patterson Loomis, professor of therapeutics and clinical medicine at Cornell University and former president of the American Academy of Medicine, died suddenly from pneumonia recently at his home, No. 58 East 34th street.

Dr. Loomis was the son of the late Dr. Alfred L. Loomis and Sarah J. Patterson Loomis. He was born in New York City in 1859 and was graduated from Princeton in 1880. He attended the New York University Medical School until 1883, and completed his studies at Heidelberg, Berlin and Vienna. He began private practice in New York City in 1884, and became visiting physician at Bellevue Hospital three years later.

Dr. Loomis was professor of pathology at New York University from 1887 to 1895, visiting physician at the New York Hospital in 1896, and consulting pathologist of the New York Board of Health in 1897. He was a contributor to several medical journals and the author of a number of treatises on diseases.

He was a member of the New York State Medical Society, the New York Pathological Society and of other medical societies and clubs, and an officer in several.

Book Reviews.

THE SEXUAL INSTINCT: ITS USE AND DANGERS AS AFFECTING HEREDITY AND MORALS—Essentials to the Welfare of the Individual and the Future of the Race. By James Foster Scott, B. A. (Yale), M. D., C. M. (Edinburgh). Second edition, 474 pp., cloth; postpaid, \$2.00. E. B. Treat & Co., publishers, New York.

This is one of the few books on the subjects of which it treats that we deem worthy of a second edition, and which we can commend to the careful consideration of both physicians and laymen, especially of fathers and young men. It deals with the delicate questions relating to sexual life in a manly, straightforward, practical manner. Its teachings are calculated to lessen the prevalence of the social vices of our day and promote the welfare of the race in coming generations.

DYSPNOEA AND CYANOSIS. Part I of three clinical treatises on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation. By Prof. Edmund von Neusser, M. D., professor of the Second Medical Clinic, Vienna. Authorized American Translation by Prof. Andrew MacFarlane, M. D. Octavo, 204 pp.; cloth, \$2.00. E. B. Treat & Co., publishers, New York.

Dr. MacFarlane, in the preface to this American edition, says: "Prof. Edmund von Neusser, with his rare diagnostic instinct and his almost uncanny memory of clinical facts and their correlation to pathological findings, typifies in the strict sense the modern master clinician. These lectures are the resultant of almost limitless clinical material and of a scientific acumen which does not overlook any fact, no matter how seemingly trivial and unimportant."

This volume is, as we might expect from such an author, a clear, concise presentation of these conditions occurring in the various disorders of the respiration and of the circulation, with a brief closing chapter on the therapy of dyspnoea giving general lines of treatment according to causation and associated conditions.

Personal.

Dr. John W. Bennett, of Long Branch, has been re-elected chairman of the Monmouth County Republican Committee, a position he has held for several years.

Dr. Henry O. Carhart, of Blairstown, has been re-elected a member of the Warren County Democratic Committee.

Dr. William Elmer, of Trenton, who has been confined to his house for several weeks, is improved in health.

Dr. D. McLean Forman, of Freehold, has been compelled by ill health to resign as Secretary of the Monmouth County Medical Society, and **Dr. Harry W. Ingling**, of Freehold, has been elected as his successor.

Dr. Isaac E. Gluckman, of Newark, has been elected superintendent of the tuberculosis sanatorium at Verona, and resigned his position as district physician to the Board of Health. **Dr. Samuel Hirschberg** was elected to fill the vacancy.

Dr. William H. Hicks, of Newark, first assistant physician and pathologist of the County Hospital for the Insane, has been granted by the Essex County Board of Freeholders a three months' vacation, which will be spent abroad in study.

Dr. William H. Lawrence, Jr., of Summit, has returned from an extended trip to Europe.

Dr. E. L. Macwithey, of Pompton Lakes, fell recently and fractured his hip; he is in a critical condition owing to his age—eighty-nine years.

Dr. John R. Merrill, of Paterson, is spending the winter months in Southern California for the benefit of his health.

Dr. H. D. McCormick, of Verona, has agreed to take the place of **Dr. W. H. Hicks**, as assistant physician and pathologist at the County Hospital during the absence of the latter abroad.

Dr. W. G. Simmons, formerly of Swedesboro, has removed to Brooklyn, N. Y.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement, November, 1907.

The number of deaths reported to the Bureau of Vital Statistics for the month ending November 15, 1907, was 2,902. By ages there were 651 deaths among infants under one year, 241 deaths of children over one year and under five years, and 774 deaths of persons aged sixty years and over. Pneumonia and diseases of the respiratory

system show a slight increase, which is usual at this season of the year. The average number of deaths from infantile diarrhoea for the previous twelve months was 206, and the number of deaths from this cause for the month ending November 15th was 201.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending November 15, 1907, compared with the average for the previous twelve months, the latter being in parentheses:

Typhoid fever, 46 (39); measles, 0 (12); scarlet fever, 12 (19); whooping cough, 19 (24); diphtheria, 49 (57); malarial fever, 0 (2); tuberculosis of lungs, 298 (306); tuberculosis of other organs, 46 (51); cancer, 128 (119); cerebro spinal meningitis, 21 (29); diseases of nervous system, 330 (387); diseases of circulatory system, 304 (313); diseases of respiratory system, (pneumonia and tuberculosis excepted), 155 (177); pneumonia, 169 (264); infantile diarrhoea, 201 (206); diseases of the digestive system (infantile diarrhoea excepted), 196 (192); Bright's disease, 233 (196); suicide, 28 (29); all other causes, 667 (578).

Food and Drugs.—During the month ending November 30, 1907, 383 samples were examined under the direction of the State Board of Health, in the State Laboratory of Hygiene. We give the articles of which specimens were found below the standard—the number examined with the number (in parentheses) found adulterated, as follows: Milk, 121 (32); coffee, 3 (3); lard, 25 (4); maple sugar, 1 (1); molasses, 27 (4); olive oil, 16 (3); vinegar, 40 (9); spirits of camphor, 32 (21); tincture of iodine, 12 (5). Number of samples of water analyzed, 91.

During the month ending November 15th, 33 suits were ordered for violations of the act to prevent the sale of adulterated and unwholesome food and drugs, as follows: Milk, 20; skim milk, 11; tincture of iodine, 2. They were referred to the Attorney General, and they were from the following localities: Atlantic City, Jersey City, Delanco, Williamstown, Camden, Collingswood, Madison, Belleville, Cranford, Nutley, Hopewell, Penns Grove, Passaic, Lafayette, Bridgeton and Beverly.

Bacteriological Examinations for Diagnosis.—From suspected cases of diphtheria, 245; from suspected cases of tuberculosis, 268; from suspected cases of typhoid fever, 296; from suspected cases of malaria, 6; miscellaneous, 17.

MEETINGS OF THE COUNTY MEDICAL SOCIETIES

County	Secretary	Place of Meeting	Time
ATLANTIC	W. F. Ridgway, Atlantic City	Englewood Club Room	3.15 P. M., Jan. 14, 1908.
BERGEN	James W. Proctor, Englewood	Cole's Hotel, Moorestown	7 P. M., Jan. 8, 1908.
BURLINGTON	George T. Tracy, Beverly	727 Federal street, Camden	8 P. M., Feb. 11, 1908.
CAMDEN	Daniel Strock, Camden	Tuckahoe	April 7, 1908.
CAPE MAY	M. F. Lummis, Holly Beach	Weatherby House, Mellville	2 P. M., Jan. 9, 1908.
CUMBERLAND	A. J. Mauder, Mellville	Oraton Hall, Newark	7 P. M., April 7, 1908.
ESSEX	Ralph H. Hunt, East Orange	George E. Reading, Woodbury	2 P. M., Jan. 15, 1908.
GLOUCESTER	George E. Reading, Woodbury	Arthur P. Hasking, Jersey City	June 9, 1908.
HUDSON	Arthur P. Hasking, Jersey City	O. H. Sproul, Flemington	8 P. M., Jan. 14, 1908.
HUNTERDON	O. H. Sproul, Flemington	Chas. H. Mitchell, Trenton	2 P. M., Jan. 15, 1908.
MERCER	Chas. H. Mitchell, Trenton	Rappowan House, South Amboy	June 9, 1908.
MIDDLESEX	Benj. Gutmann, New Brunswick	Henry W. Kice, Wharton	8.30 P. M., Jan. 14, 1908.
MONMOUTH	Henry W. Kice, Wharton	Henry Chavanne, Salem	2 P. M., Feb. 5, 1908.
MORRIS	Henry W. Kice, Wharton	Ten Eyck House, Somerville	3 P. M., Jan. 9, 1908.
OCEAN	Alex. M. Heron, Lakewood	Newton	11 A. M., May 12, 1908.
PASSAIC	Elias J. Marsh, Jr., Paterson	Braun Building, Paterson	8.30 P. M., Jan. 14, 1908.
SALEM	Henry Chavanne, Salem	Schaefer House, Salem	2 P. M., Feb. 5, 1908.
SOMERSET	W. H. Long, Somerville	Ten Eyck House, Somerville	3 P. M., Jan. 9, 1908.
SUSSEX	Shepherd Voorhees, Newton	Newton	11 A. M., May 12, 1908.
UNION	P. Du Bois Bunting, Elizabeth	Belvidere	May, 1908.
WARREN	William J. Burd, Belvidere	Belvidere	May, 1908.

Secretaries will please notify the editor promptly of places and times of meetings.

**PROPRIETARY PREPARATIONS APPROVED
BY THE A. M. A. COUNCIL ON PHAR-
MACY AND CHEMISTRY.**

(Continued.)

PIPERAZINE.

Piperazine, $\text{NH} \begin{array}{c} \diagup \text{CH}_2\text{CH}_2 \diagdown \\ \diagdown \text{CH}_2\text{CH}_2 \diagup \end{array} \text{NH} = \text{C}_4\text{H}_{10}\text{N}_2$, is

a synthetic base obtained by the condensation of two CH_2CH_2 groups, with two :NH groups.

Actions and Uses.—A part of the piperazine ingested passes undecomposed into the urine and is claimed by some to form a very soluble compound with the urinary uric acid; others state that the piperazine which is excreted is largely in combination with the stronger mineral acids. It has been shown that urine containing piperazine has no greater solvent power on uric acid than ordinary urine. It seems to produce no symptoms in man or animals, even when administered in fairly large quantities, although it is stated that, after large doses, tremors, clonic spasms and general depression have occurred. Piperazine has been recommended for the prevention of the formation of renal and vesical calculi and for the relief of irritation of the bladder due to excess of uric acid in the urine and in cases of chronic gout, rheumatism, renal colic, etc. The attempt to secure the solution of uric acid in the body by this as well as other remedies has not been successful in the experience of many clinicians. Dosage.—0.3 to 0.6 Gm. (5 to 10 grains); daily dose, 1 to 2 Gm. (15 to 30 grains). Owing to its hygroscopic character, it is impracticable to dispense it in powder; it should, therefore, be dispensed in solution in water, plain or carbonated, but in quantities sufficient for a day's supply only. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York). Also by Chemische Fabrik auf Actien vorm. E. Schering, Berlin (Schering & Glatz, New York).

POLLANTIN (FALL).

An antitoxic serum from horses treated with pollen toxin derived from ragweed.

Actions and Uses.—It has no pharmacologic action except the neutralization of the pollen toxin. The serum is not intended for use hypodermically. It is employed for the relief of hay fever. It may be used as prophylactic. Dosage.—One drop should be instilled by means of a pipette into the outer angle of each eye and one or two drops into one nostril, the other being kept closed, every morning before rising. If the first application causes sneezing or reddening of the mucous membrane of the eye, it is recommended to repeat the application, even for the fourth time, if necessary. Manufactured by Schimmel & Co., Miltitz, near Leipsic. (Fritzsche Bros., New York.)

POLLANTIN POWDER (FALL).

A powder obtained by evaporating, *in vacuo*, pollantin serum derived from ragweed toxin at about 45° C. (113° F.) and mixing with sterilized sugar of milk.

Actions and Uses.—The same as those of the liquid. Dosage.—The powder is applied to the eyes by dusting on the conjunctiva and to the nose by snuffing into one nostril, the other being closed, a piece as large as an lentil. Manufac-

tured by Schimmel & Co. Miltitz, near Leipsic (Fritzsche Bros., New York).

PROTARGOL.

Protargol is a compound of albumin and silver, containing 8.3 per cent. of silver in organic combination.

Action and Uses.—Protargol is a non-irritant bactericide and antiseptic. It is being recommended in acute and chronic gonorrhea as a non-irritant substitute for silver nitrate and in diseases of the mucous membranes of the eye, ear, nose and throat, particularly for the treatment of conjunctivitis. Dosage.—From 0.25 or 1 per cent. solutions in acute gonorrhea, to 5 or 10 per cent. instillations in chronic cases, in cystitis and urethritis; in solutions of 1-1,000 to 1-2,000 as irrigations. Used also in form of bougies and tampons (5 to 10 per cent.). Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

PURGATIN.

Purgatin, $\text{C}_{14}\text{H}_5(\text{OH})(\text{CH}_3\text{COO})_2\text{O}_2 = \text{C}_{18}\text{H}_{12}\text{O}_7$, is the diacetyl ester of trihydroxanthraquinone (anthrapurpurin).

Actions and Uses.—It is a laxative, said to be free from by-effects. Being insoluble in dilute acids, it passes unchanged into the intestinal tract, where it is slowly split up and produces painless peristalsis. The urine behaves as it does after the ingestion of rhubarb. It has a reddish color and reduces Nylander's reagent. Purgatin is recommended as a mild laxative. Dosage.—0.5 to 2 Gm. (7 to 30 grains), according to individual idiosyncrasy, in powder, capsules or tablets, taken at night. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

PYRAMIDON.

Pyramidon,
 $\text{C}_6\text{H}_5\text{N} \begin{array}{c} \diagup \text{CO} \diagdown \\ \diagdown \text{N}(\text{CH}_3)_2 \diagup \end{array} \begin{array}{c} \text{C.N}(\text{CH}_3)_2 \\ | \\ \text{N}(\text{CH}_3)_2 \end{array} \text{C}(\text{CH}_3)_2 = \text{C}_{18}\text{H}_{17}\text{N}_5\text{O}$

is phenyl-dimethyl-dimethylamido-pyrazolon, a substitution product of antipyrine, $\text{C}_{11}\text{H}_{12}\text{N}_2\text{O}$, into the molecule of which a dimethylamino group, $\text{N}(\text{CH}_3)_2$, has been introduced.

Actions and Uses.—Pyramidon acts as an antipyretic and anodyne, like antipyrine, but is effective in much smaller doses. The action, while somewhat slower at the beginning, is more lasting. It is claimed to be devoid of harmful influence on the blood, heart or kidneys; to the contrary, it is said to stimulate the heart's action. It has been recommended particularly in the chronic fevers of tuberculosis, as well as in the acute febrile conditions incident to typhoid fever, erysipelas and pneumonia. Dosage.—0.3 to 0.4 Gm. (5 to 6 grains), most conveniently in the form of tablets, a single dose usually sufficing for 24 hours. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koehl & Co., New York).

PYRAMIDON NEUTRAL CAMPHORATE.

This compound, $(\text{C}_{18}\text{H}_{12}\text{N}_5\text{O})_2 \cdot \text{C}_{10}\text{H}_{16}\text{O}_4$, is a neutral salt of pyramidon and camphoric acid.

Actions and Uses.—See pyramidon acid camphorate. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koehl & Co., New York).

THE MEDICAL SOCIETY OF NEW JERSEY.

OFFICERS.

<i>President</i> , EDWARD J. ILL.....Newark.	<i>Corresponding Secretary</i> , DANIEL STROCK.....Camden.
<i>First Vice-President</i> , DAVID ST. JOHN.....Hackensack.	<i>Recording Sec'y</i> , WM. J. CHANDLER.....South Orange.
<i>Second Vice-President</i> , B. A. WADDINGTON.....Salem.	<i>Treasurer</i> , ARCHIBALD MERCER.....Newark.
<i>Third Vice-President</i> , THOMAS H. MACKENZIE.....Trenton.	

TRUSTEES.

CHARLES J. KIPP, <i>Chairman</i>Newark	CLAUDIUS R. P. FISHER.....Bound Brook
DAVID C. ENGLISH, <i>Secretary</i>New Brunswick	LUTHER M. HALSEY.....Williamstown
JOHN C. JOHNSON.....Blairstown	JOHN D. MCGILL.....Jersey City
JOHN W. WARD.....Trenton	EDMUND L. B. GODFREY.....Camden
H. GENET TAYLOR.....Camden	HENRY MITCHELL.....Asbury Park
ELIAS J. MARSH.....Paterson	WALTER B. JOHNSON.....Paterson
GEORGE T. WELCH.....Passaic	ALEXANDER MARCY, JR.....Riverton
JOHN G. RYERSON.....Boonton	EDWARD J. ILL.....Newark
OBADIAH H. SPROUL.....Flemington	DAVID ST. JOHN.....Hackensack.
WILLIAM ELMER.....Trenton	WILLIAM J. CHANDLER.....South Orange
THOMAS J. SMITH.....Bridgeton	

PRESIDENTS, SECRETARIES AND REPORTERS OF COUNTY SOCIETIES.

County	President	Secretary	Reporter
ATLANTIC.....	E. C. Chew, Atlantic City.....	Wm. F. Ridgway, Atlantic City...	A. Burton Shimer, Atl. City
BERGEN.....	Alfred W. Ward, Closter.....	James W. Proctor, Englewood.....	Chas W. Harreys, Ridgewood
BURLINGTON.....	Joseph Stokes, Moorestown.....	George T. Tracy, Beverly.....	Wm. P. Melcher, Mt. Holly
CAMDEN.....	Sylvan G. Bushey, Camden.....	Daniel Strock, Camden.....	Henry H. Sherk, Camden
CAPE MAY.....	Nathan A. Cohen, Wildwood.....	M. F. Lummis, Holly Beach.....	M. F. Lummis, Holly Beach
CUMBERLAND.....	Elton S. Corson, Bridgeton.....	A. J. Mander, Millville.....	S. M. Wilson, Bridgeton
ESSEX.....	Herman C. Bleyle, Newark.....	Ralph H. Hunt, East Orange.....	Frank W. Pinneo, Newark
GLOUCESTER.....	M. Jones Luffbary, Glassboro.....	George E. Reading, Woodbury.....	Howard A. Wilson, Woodbury
HUDSON.....	Frank D. Gray, Jersey City.....	Arthur P. Hasking, Jersey City...	A. A. Strasser, Arlington
HUNTERDON.....	Morris H. Leaver, Quakertown.....	O. H. Sproul, Flemington.....	Leon T. Salmon, Lambertville
MERCER.....	David F. Weeks, Trenton.....	Charles H. Mitchell, Trenton.....	Edgar L. West, Trenton
MIDDLESEX.....	Edgar Carroll, Dayton.....	Benj. Gutmann, New Brunswick...	A. L. Smith, New Brunswick
MONMOUTH.....	Harry E. Shaw, Long Branch.....	Harry W. Ingling, Freehold.....	Harry B. Slocum, Long Branch
MORRIS.....	George H. Foster, Rockaway.....	H. W. Kice, Wharton.....	H. S. Wheeler, Whippany
OCEAN.....	Ralph H. Jones, Toms River.....	Alex. M. Heron, Lakewood.....	Wm. G. Schaufler, Lakewood
PASSAIC.....	John T. Gilson, Paterson.....	E. J. Marsh, Jr., Paterson.....	E. Lucas Henion, Paterson
SALEM.....	Nathaniel S. Hires, Salem.....	Henry Chavanne, Salem.....	John F. Smith, Salem
SOMERSET.....	J. Hervey Buchanan, N. Plainfield.	Wm. H. Long, Somerville.....	Aaron L. Stillwell, Somerville
SUSSEX.....	John Moore, Sussex.....	Shepherd Voorhees, Newton.....	H. D. Van Gaasbeek, Sussex
UNION.....	Horace R. Livengood, Elizabeth.....	P. Du Bois Bunting, Elizabeth.....	Milton A. Shangle, Elizabeth
WARREN.....	Thos. S. Dedrick, Washington.....	Wm. J. Burd, Belvidere.....	J. H. Griffith, Philipsburg

The Secretary of the component society should promptly notify the recording secretary of the Medical Society of New Jersey of any error or change in these offices.

COUNCILORS.

First District—(Sussex, Warren, Morris and Essex Counties)	THOS. W. HARVEY, Orange
Second District—(Union, Bergen, Hudson and Passaic Counties)	J. L. LEAL, Paterson
Third District—(Mercer, Middlesex, Somerset and Hunterdon Counties)	W. A. CLARK, Trenton
Fourth District—(Camden, Burlington, Ocean and Monmouth Counties)	WM. H. ISZARD, Camden
Fifth District—(Cape May, Cumberland, Atlantic, Gloucester and Salem Counties) ..	PHILIP MARVEL, Atl. City

Committee on Publication.

WM. J. CHANDLER, <i>Chairman</i> , South Orange.....	<i>ex-officio</i>
CHAS. J. KIPP, Newark.....	Term expires 1908
ELLIS W. HEDGES, Plainfield.....	1908

Committee on Scientific Work.

ELIAS J. MARSH, JR., <i>Chairman</i> , Pat'son Term expires 1910	
NORTON L. WILSON, Elizabeth.....	1909
TALBOT R. CHAMBERS, Jersey City.....	1908

Committee on Credentials

DANIEL STROCK, <i>Chairman</i>	Camden
ARCHIBALD MERCER.....	Newark
THEODORE SENSEMAN.....	Atlantic City

Committee on Honorary Membership.

H. GENET TAYLOR, <i>Chairman</i>	Camden
ELIAS J. MARSH.....	Paterson
LUTHER M. HALSEY.....	Williamstown

Committee on Program.

WM. J. CHANDLER, <i>Chairman</i> , South Orange.....	<i>ex-officio</i>
ALEXANDER MCALISTER, Camden.....	Term expires 1908
FREDERICK F. C. DEMAREST, Passaic.....	1909

Committee on Finance.

DAVID C. ENGLISH, <i>Chairman</i>	New Brunswick
HENRY MITCHELL.....	Asbury Park
WILLIAM ELMER.....	Trenton
WM. J. CHANDLER.....	South Orange

Committee on Business.

JOHN P. HECHT, <i>Chairman</i>	Somerville
WALTER E. HALL.....	Burlington
PHILANDER A. HARRIS.....	Paterson

JAMES HUNTER, JR.....	Westville
EMERY MARVEL.....	Atlantic City

Committee on Prize Essay.

CHARLES J. KIPP.....	Newark
DAVID C. ENGLISH.....	New Brunswick
WILLIAM ELMER.....	Trenton

Committee on Arrangements.

DANIEL STROCK, <i>Chairman</i>	Camden
PAUL M. MECRAY.....	Camden
JAMES MECRAY.....	Cape May
VIRGIL M. D. MARCY, JR.....	Cape May
ENOCH HOLLINGSHEAD.....	Pemberton
HARRY A. STOUT.....	Wenonah

Committee on Public Hygiene and Legislation.

L. M. HALSEY, <i>Chairman</i> , Williamstown. Term expires 1910	
WILLIAM ELMER, Trenton.....	1908
AARON K. BALDWIN, Newark.....	1908
HENRY H. DAVIS, Camden.....	1910
WILLIAM G. SCHAUFFLER, Lakewood.....	1909
FRANK D. GRAY, Jersey City.....	1909

Committee on Medical Defense.

WILLIAM G. SCHAUFFLER.....	Lakewood
THOMAS N. GRAY.....	East Orange
WILLIAM P. MELCHER.....	Mt. Holly

Delegates to the American Medical Association.

ELIAS J. MARSH, Paterson.....	Term expires 1908
CHARLES J. KIPP, Newark.....	1909
LUTHER M. HALSEY, Williamstown.....	1909

Alternate Delegates.

FRANK D. GRAY, Jersey City, and WM. S. LALOR, Trenton.	
--------------------------------------------------------	--

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 8.

ORANGE, N. J., FEBRUARY, 1908.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

THE VALUE OF THE LEUCOCYTIC COUNT AS A DIAGNOSTIC AID.*

By J. Watson Martindale, M. D.,
Camden, N. J.

There are ordinarily from 5,000 to 10,000 white blood corpuscles and from 4,500,000 to 5,500,000 red blood corpuscles in a cubic millimeter of blood. When the number of white cells is increased we call it a condition of leucocytosis. When the white cells are decreased in number it is spoken of as a leucopenia.

There are a number of conditions in which there is a high leucocytic count. I will not summarize them here, as they can all be found in the text-books, but will merely cite five cases which came under my observation during the past year, in which the diagnosis and subsequent treatment were based largely on the leucocytic count.

Case No. 1.—A girl of nineteen years came under my care in October last. She was suffering from headache, rapid pulse, coated tongue, enlarged spleen, tympanitic abdomen and marked tenderness in the right iliac fossa. The Widal test was negative. An Ehrlich diazzo reaction was tried and also found to be negative. She had been living in Philadelphia, and at that time there was an unusual amount of typhoid fever in the city. In spite of the absence of the Widal test, a diagnosis of typhoid fever was made. A brother of hers had undergone a like experience the year before. His physician had made a diagnosis of typhoid fever, and had treated him

for the same. He grew rapidly worse, and a consultant was called in. This gentleman pronounced it a case of appendicitis, and the young man was removed to the German Hospital, where a gangrenous appendix was removed. He (the brother) suggested that the surgeon who operated on him should see his sister. The surgeon came and went over the case with me. He said he did not think it was typhoid fever, as it lacked a good many of the characteristics of that malady. He examined over the appendix, and elicited quite some tenderness and rigidity. He proposed a leucocytic count. This was made. It was 7,500—a low figure. The consultant argued that a case of appendicitis with the fever this young lady presented would probably show pus, and if there were a pus collection she would have a leucocytosis. In typhoid there is always a leucopenia. The microscope decided the line of treatment. If there had been a high leucocytic count she would have been probably taken to the hospital for operation. In the course of a few days some rose spots developed, delirium supervened, and she went through a severe attack of typhoid fever complicated with phlebitis of the leg, which eventually suppurred.

Case No. 2.—A woman was admitted to the ward of the Kensington Hospital for Women; she had been sent there after an examination by two general practitioners. Her history was as follows: She had suffered considerable pain in the pelvis for two years past. There had been irregular uterine hemorrhages, followed by periods of weakness and malaise. She had had nine children and was at the time of admittance forty-one years of age. She had not had

* Read before the Camden County Medical Society, October 8, 1907.

any children for six years, although previous to that time she had borne children at short intervals. She was quite anemic in appearance, which was supposed to be due to the uterine hemorrhages from which she had suffered. A vaginal examination was made. The uterus was uniformly enlarged and markedly retroflexed. It was bound down by adhesions. An attempt was made to bring the uterus forward, but it failed. It was also attempted in the knee chest position, without effecting a reposition. To the left of the uterus a mass as large as an orange was felt. It was quite movable. The patient said she felt the mass herself before she called in a physician. According to her story, it began in the lower part of the pelvis, and as it grew it was pushed upwards. A diagnosis of uterine fibroma was made, and the mass to the side of the uterus was taken to be a pedunculated fibroid. At the hospital the surgeon in charge made a vaginal examination, and said he doubted the existence of a fibroid tumor. A leucocytic count was made, and there were 180,000 white cells to the cubic millimeter. The woman was suffering from leukemia, and the movable mass to the left of the uterus was not a pedunculated fibroid, but an enlarged spleen. She was not operated on, and in a short time she sank into a stupor and died. The diagnosis in this case would have been impossible to arrive at had it not been for the examination of the blood. This woman had lived in a highly malarious region and it was suggested that she might have malaria, while the mass was the so-called ague cake. Gowers reports a history of malaria in thirty of his 150 cases of leukemia. It is probable that in her case malaria was the causative factor.

Case No. 3.—I was hastily summoned to see a girl of fourteen years who was suffering from violent abdominal pain. The pain came in paroxysms, and the mother said she thought it was due to approaching menstruation. She had not as yet menstruated. I found the patient with her knees flexed, pinched face, rapid pulse and general appearance of one who was seriously sick. There was considerable abdominal rigidity and marked tenderness over McBurney's point. There was no rise of temperature. I ordered purgatives and the ice bag to the abdomen. My next visit during the evening found her much better. The purgative had moved the bowels and she had expelled considerable gas, thus relieving the abdominal distention. Next morning the mother said she was better, as she had no pain.

Upon examination I found that her pulse was more rapid, and that she had a subnormal temperature. I told the family she was suffering from appendicitis, and that I thought the appendix was ruptured. The family called in a consultant, who went over the case with me. He asked if she had yet menstruated. On being answered in the negative, he took the same view as the mother had done, and said he believed the girl was hysterical, and that the pain she suffered was due to approaching menstruation. He suggested a leucocytic count. This was made. There were 15,000 white cells to the cubic millimeter. She was removed to St. Mary's Hospital, Philadelphia, where I operated on her. As soon as the peritoneum was opened a thin stream of watery pus escaped. On putting in a retractor it was found that the abdominal cavity was filled with pus and fecal matter, and that she had a general peritonitis. A large drainage tube was placed in the wound and the girl put in bed with her head raised to an angle of forty-five degrees. A rectal tube was placed in the bowel, and through it a continuous stream of salt solution was passed, thence out through the incision in the abdomen. Drainage was kept up until the cavity healed. She eventually got well. There was no attempt made to find the appendix.

Case No. 4.—Mrs. C., twenty-nine years of age, mother of five children. She had always enjoyed good health. There was no history of gonorrhea or puerperal infection. She was suddenly seized with violent abdominal pain in the middle of the night. Morphine by the mouth relieved the pain to some extent. Next morning found her suffering from shock. Her pulse was running very rapidly and she had attacks of syncope when her head was raised. Her temperature was 100 degrees F. She suffered excruciatingly if she moved or if pressure was made over the abdomen. There was marked tenderness in the right iliac fossa. Bimanual examination was attempted, but, owing to the extreme tenderness, was not at all satisfactory. She developed rhinitis and an accompanying bronchitis. A diagnosis of abdominal grip was suggested. At another time appendicitis was suspected. There were some things in the history which were suggestive of ectopic gestation. She gradually grew worse, and on the fifth day of her illness she was taken in an ambulance to the Kensington Hospital for Women, Philadelphia. She was kept under observation for several days. Finally a

mass began to show itself in the posterior cul de sac. Now the diagnosis rested between an ectopic pregnancy and a pelvic abscess. A leucocytic count was made, and when the resident reported a leucocytosis of 18,000 it was decided to operate. On doing so a cavity containing a large amount of pus was opened. She made a good recovery.

Case No. 5.—Mrs. W., aged forty years, mother of five children, had not menstruated for two years until two months ago, when quite a profuse menstrual flow appeared. Three weeks ago she began to complain of violent pain in the right inguinal region. At times it became very severe. Her physician thought she had some inflammatory condition in the right appendage, and used tampons of ichthyol and boroglycerite with good effect. After the use of the tampon the pain was considerably relieved. In the course of a few days she began to vomit blood. This was supposed to be vicarious menstruation. I saw her in consultation about the third week of her illness. On examination I found that she was exquisitely tender in the region of the right cornu of the uterus. There was apparently an ill-defined mass towards the uterine end of the tube. The parts were so tender that it was impossible to make anything like an accurate diagnosis. There was some fever at the time, and we thought there was an inflammatory condition in the tube which was going on to suppuration. The hematemeses was now thought to be due to ulcer of the stomach. A leucocytic count was made. There were 9,000 white cells to the millimeter. This at once threw out the diagnosis of a purulent salpingitis. Here another question arose. It was necessary to use the stomach tube to get the gastric contents for examination, while the authorities forbid the use of the tube for some time after a hemorrhage. Finally we decided to take the risk. A test breakfast was given and an hour afterwards the stomach tube inserted. It passed into the stomach without difficulty, and when it was withdrawn it was covered with blood. The phloroglucin-vanillin, tropoealin, congo red and litmus tests were used, and failed to detect the slightest trace of hydrochloric acid. Uffelmann's test showed the presence of lactic acid. A second and third examination verified the findings of the first. The woman was suffering from cancer of the stomach, accompanied by an involvement of the body of the womb.

TECHNIC OF THE BLOOD COUNT.

As it would be utterly impossible to count the number of blood corpuscles in a cubic millimeter of blood without artificial aid, a number of instruments have been invented for that purpose. The instrument I have here is known as a Thomas-Zais hemocytometer. This is a glass slide in which a well one-tenth of a millimeter in depth has been sunk. The well has a sufficient capacity to contain a definite quantity of blood and its diluting fluid. At the bottom of the well there is a figure composed of 16 squares. Each square is subdivided into 25 smaller squares; thus 25 multiplied by 16 gives a total of 400 squares. By counting the number of corpuscles in these 400 small squares we can arrive at the number of cells in the cubic millimeter of blood. To simplify matters and make less blood corpuscles to count we dilute the blood with suitable fluids. Let us take first the white cells. We take the pipette which is marked .01, 1 and 11. A drop of blood is secured from the finger or the ear, and is drawn up in the pipette till it reaches the 0.5 mark. Then the pipette is placed in the solution of glacial-acetic acid (one-half of a 1 per cent. solution) and the fluid drawn up till it comes up to the 11 mark, thus making a dilution of 1 in 20. The acetic acid solution is used for the purpose of diluting the blood, destroying the red cells and bringing out the nuclei of the white. In counting the white cells it is customary to blow one drop of this solution into the well of the counting stage. Place a cover glass on top, then put under a low power lens to examine. We count all the cells in the 16 squares. They generally average about three to each square. Supposing that there is an average of three white cells to the square, we multiply 16×3 , making a total of 48 in the field. The dilution is 1 in 20, so we multiply 48×20 , giving us 960. The well is one-tenth of a cubic millimeter in depth. We multiply by 10, which gives us 9,600, practically a normal leucocytic count.

In counting the red cells we use a solution of sodium sulphate and acetic acid, which destroys the white cells and acts as a diluent. The pipette in this case is smaller in calibre, while the bowl is larger. The figures on this pipette are .05, 1 and 101. We draw up a quantity of blood until we arrive at .05, then we put the pipette into the sodium sulphate solution and draw it up till we reach the 101 mark. Thus you see we have a dilution of 1 in 200. The

square in this case will contain from 120 to 170 red cells—an average of 156 per square. Multiply 156×16 , which will give the number of cells in the entire field, then by 200 to get the amount of the dilution, and finally by 10 to make up for the depth of the well—thus $156 \times 16 \times 200 \times 10$ gives us 4,992,000, or practically 5,000,000 red cells, which is the number in a cubic millimeter of healthy blood. In estimating the red blood I always count four large squares, then multiply by 4, thus making 16 squares. The red blood count requires a one-eighth objective, while the leucocytic count can be done with a low power.

DIAGNOSIS OF CHRONIC ENDOCARDITIS—PRIOR TO DISTURBANCE IN COMPENSATION.*

By Leonard G. Rowntree, M. D.,
Baltimore, Md.

In diseases of the heart we have only three roads to a diagnosis. These are symptomatology, physical diagnosis and etiology, and are nicely shown in Colbeck's diagram.

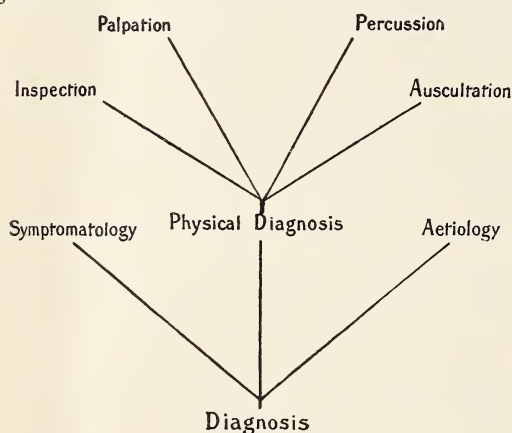


FIG. 7. DIAGRAMMATIC REPRESENTATION OF THE DIAGNOSIS

There is a straight and narrow way. If it were always taken, the goal would be oftener reached. But many take the broad way of symptoms, or the wide way of causes, and never reach the goal. Physical examination is the narrow way—the safest way, but diagnosis is best based on a consideration of all three.

IMPORTANCE OF ROUTINE IN ORDER TO SECURE ACCURATE DIAGNOSIS.

A physical examination of the heart and lungs must be made in all new patients.

*Read before the Camden City Medical Society and cases were presented Sept. 10, 1907.

This is an excellent rule to apply to medical cases and an absolutely necessary rule if correct diagnoses are to be made. Routine examination of the heart must be made, for three reasons:

(1) During the development of any lesion of the left side, except in cases of rupture or of sudden onset, compensation develops hand in hand with the destructive processes, and so no subjective symptoms are complained of. The condition is unsuspected, and this latent condition should not be found by accident, but should be found as the result of routine and system in studying the patient; (2) the heart cannot be diseased without influencing or lowering the function of some other organ to which it supplies blood. This second organ displays abnormal symptoms and is considered diseased. Treatment is directed to it, but to no avail, and the pathological process in this organ progresses, whereas if the heart were recognized as the original cause, and treatment directed to it, symptoms in the other organ would disappear and the pathological process be checked. In other words, in the absence of routine examination, treatment will often be directed to the wrong organ, because the diagnosis is incorrect; (3) other diseases disturb the action of the heart; even if no organic change be present in it, its altered action will direct the physician's attention to some other organ that has escaped examination, e. g., a continued rapid heart action, in the absence of fever or other obvious cause, will suggest to the physician an examination of the thyroid gland. Routine examination will guide the clinician past a thousand pitfalls, and save him from many a fall in the miry clay.

IMPORTANCE OF EARLY DIAGNOSIS.

A stone at its source has changed the course of a river; so with valvular disease of the heart. The late diagnosis of pulmonary tuberculosis is of no value. To be of value, it must be early, and this is also true of chronic endocarditis, though more can be done for the latter than for the former condition. Except for sudden death in aortic regurgitation, there is very little inconvenience or danger to the subject of valvular disease till compensation is broken. Vast numbers are unaware of the fact that they have a disease of any kind; many are enjoying fair health, but every day these people are subjecting themselves to strains—are worrying, are hurrying and doing those very things that will soon bring

broken compensation and its dire train of symptoms. Early diagnosis is essential as a means for instituting prophylaxis.

Asepsis and antisepsis in surgery, anaesthesia, and the progress of preventive medicine were the three greatest achievements of the last century. The prevention of the onset of broken compensation belongs to that last class, and is just as important as the prevention of an epidemic of typhoid.

It is impossible to unfurl a sclerotic valve, but it is possible to maintain compensation for years by the regulation of the habits and mode of life. If compensation is once broken, the heart is never the same again, though compensation may be restored in a sense. Each attack predisposes to another until the patient is waterlogged and death finds a willing victim. Our greatest aim and greatest object in the treatment of heart diseases is, then, to maintain compensation.

Symptoms are uncertain — subjective symptoms are the morbid sensations experienced by the patient as the result of disease, true or imagined, of some organ or system. These necessarily vary in quality and severity with the patient describing them and assume proportions relative to the excitability and loquacity of the same individual. Subjective symptoms have their value, it is true, but they do not form a safe or certain road to diagnosis. They serve only as a guide to direct the attention of the physician to some organ or system, the condition of which he must fully investigate, both by further interrogation and by physical examination. We consider symptoms of little importance.

In disease of the heart, as in all other diseases, the interrogation of the patient divides naturally into two parts:

1. General interrogation, including age, nationality, address, race, social condition, married or single, chief complaint, duration of chief complaint, family history, previous illnesses, and an insight into the personal habits of patient and into his occupation. After carefully noting the symptoms as detailed by the patient, the physician further questions him concerning the symptoms common to the disease most strongly suggested, and thereby has his suspicions confirmed as to the probable diagnosis, or his doubts raised.

2. Special interrogation. Here leading questions concerning all the symptoms of the suspected disease are asked and the character and severity of each obtained. The doctor becomes the lawyer and cross-examines the patient. The symptom given

by the individual as his chief complaint may apparently have no connection with disease of the heart; hence the necessity of routine examination. But certain symptoms make a cardiac examination imperative. The twelve most strongly demanding further investigation will be considered. Investigation takes two forms—(a) direct, or special interrogation; (b) physical examination.

1. Dyspnoea, first as seen after slight exertion; second, paroxysmal dyspnoea arising without cause, or from asthma; third, continued dyspnoea, depending on posture, seen as orthopnea. This last variety is usually associated with symptoms and signs of broken compensation, and need be no further studied in this connection.

2. Cough. This is usually associated with circulatory changes in the lungs, and depends on congestion, bronchitis, etc.

3. Hemorrhage. This symptom, no matter from what source it arises, should lead to a suspicion of the heart. Epistaxis, hæmoptesis, hæmatemesis, melena, menorrhagia, metrorrhagia. An examination of the heart is as necessary in hæmoptesis as in an examination of the lung.

4. Pain in the præcordia. As a rule, this is not so great a subject of complaint early in organic affections of the heart as in nervous derangement, except in case of aortic incompetency, where it may be a very prominent and troublesome symptom long before compensation is disturbed. Præcordial pain may be (1) constant (and in some cases confined to the fifth rib on the left side, which I think might be justly ascribed to pressure from a hypertrophied and over acting heart); or it may be (2) paroxysmal as in true or pseudo angina.

5. Palpitation. This can usually be elicited by questioning, but as a rule is not so prominent except in the cardiac neuroses.

6. Vertigo and faintness are among the earliest symptoms experienced in aortic regurgitation.

7. Headache. This is usually most troublesome in the cardiac neuroses. Probably it is a concomitant rather than a symptom, as the casual factor giving rise to neurosis of the heart will produce nervous derangement elsewhere and thus headache. It is also prominent in aortic incompetency.

8. Cyanosis, venous congestion, cold hands and feet, and clubbing of fingers, are easily seen and are very suggestive.

9. Disturbed sleep. This, to my mind, is of far greater value than it is usually considered. Audible beat and pulsation in

the ear often makes the subject of aortic disease an unwilling victim of insomnia. Sleep start is usually present if inquired for, and morbid dreams are very common. These symptoms are not often the subject of chief complaint, but are vividly described when the leading question is asked.

10. Oedema. Not usually present in this stage.

11. Paralysis and aphasia. Embolic symptoms should always suggest a mitral stenosis, or an active vegetative endocarditis. Frequently these embolic phenomena disappear entirely, so that a history of past paralysis or aphasia must be looked for.

12. Dyspepsia. This I place last that it may remain with you till the last. Every day thousands of victims of cardiac disease consult doctors, clinics and dispensaries, and are given stomach mixtures, powders and pills, and the cause of their ailments is not discovered. Nausea and vomiting are most frequently associated with enlargement of the liver, and often these cases do not do well on digitalis, but little can be done for them until venous engorgement is relieved, and here rest in bed. Digitalis, calomel and squills usually afford the greatest relief, and they cannot usually be controlled till the heart is treated. I cannot emphasize too strongly the importance of examination of the heart in gastric disturbances, for many of our victims of dyspepsia, indigestion, etc., are really the victims of heart disease, and will remain the victims of indigestion till the heart condition is treated.

ETIOLOGY.

Chronic endocarditis may be primary or secondary to acute endocarditis. The acute endocarditis is most frequently due to rheumatism. Over 50 per cent. of those attacked by rheumatic fever develop endocarditis. In a series of 889 cases of persons who had rheumatism, Church found 494 showing evidence of past or present cardiac lesion. But acute rheumatism is not necessary. Here must be emphasized the importance of "growing pains" and of "pains caused by growing too fast." These are usually a form of subacute rheumatism occurring in adolescence and in early youth, giving rise to a slow sclerosing process in the valve segment. In the same category must be placed tonsillitis. These three are not usually given by the patient in telling of his previous illnesses, but are frequently obtained when asked for. Scarlet fever, smallpox, measles, chorea and pneumonia are also factors in the primary acute endocarditis.

Second class factors tending to give high arterial tension play an important role in initiating the insidious slow sclerosing process. Alcohol, syphilis and gout come under this group, as do also prolonged muscular exercise and strain of work in certain arduous occupations, as mining, horse-shoeing, soldiering, etc. Changes in the valves often onset with advancing age, especially after the fortieth year is passed, and heredity can be traced in many instances.

These two aids to diagnosis, viz., symptomatology and etiology, are valuable. But for nearly a century a better and surer method has been known—a method older than the years of practice of any of the men of to-day: I refer to physical examination.

Clinical medicine to-day is what it was made by Laennec in the early part of the last century. Auenbrugger, a young Austrian physician, practiced direct percussion as early as 1760, and in 1761 wrote a pamphlet describing his discovery. His works and writings only brought him criticism and derision, and not till the year of his death did he see any appreciation of his great gift to medicine. To France belongs the credit for perfecting physical diagnosis and spreading its teachings world-wide.

In 1803 Corvisart, recognizing the value of Auenbrugger's discovery, translated the pamphlet into French, and adopted and taught this method. Mediate percussion, a modification of Auenbrugger's discovery, was introduced by Piorry in 1810. At this time London and Edinburgh were the medical centers of the world, and physicians from all countries congregated there to learn medicine. In Paris lived, taught and worked Laennec, the great Laennec, who was to awaken the whole medical world and give it new life. In 1815 he discovered auscultation and introduced it into his work, and taught physical diagnosis as we know it at the present time. But not till 1823 did the first translation of Laennec (a reprint of Forbes' edition) appear in English. So great was Laennec and his school that after this edition appeared the medical center of the world was changed, and Paris stood first, high above all. It is interesting to know that it was the perfecting and teaching of this method of study which caused Paris to supersede London and to turn the footsteps of the followers of Esculapius from England to France.

In studying the topographical anatomy of the heart, we are going to briefly locate the auscultatory areas, and not the positions

of the valves themselves. These auscultatory areas are the areas where the sounds of the respective valves are heard with the greatest clearness and distinctness, that is, with maximum intensity. Thus we listen to the mitral sounds at the cardiac apex, the tricuspid at the lower end of the sternum, the pulmonary in the second interspace immediately to the left of the sternum, and to the aortic sounds over the aorta in the second right interspace, and over the third right costal cartilage. The heart lies to the left of a line drawn downwards from the sternal end of the right clavicle and to the right of an oblique line considerably convexed upwards and outwards—drawn from the second costal cartilage one inch from the left sternal border to the upper border of the sixth rib one inch internal to nipple line.

In examination of the heart, inspection, palpation, percussion and auscultation are employed in the order indicated.

Inspection unconsciously starts on the arrival of the patient, and much can be learned before the shirt is removed. Much can be learned, but not enough—a good light and a naked chest are needed. Inspection reveals: 1. Form of the praecordium as to bulging, retraction, etc., and also the form of the surrounding chest wall; 2. Movements. These movements may be in the praecordial area, or outside the praecordial area. In the praecordial area, apex beat should be located; diffuse pulsation, or any other pulsation noted, while outside of the heart area pulsation should be looked for in the epigastrium, cervical and thoracic regions, and in the episternal notch; 3. Condition of the vessels. Dilated venules may be noted on the nose or cheeks, telangiectasis, pulsating veins in the neck. Locomotor pulse in the arms often attracts the attention. Cyanoses may be very apparent. When carotid arteries forcibly throb, capillary pulse should be tried for.

Palpation determines: 1. The form of the praecordium as in inspection; 2. Movements of the praecordium, (a) of apex beat to determine character of heart's action and strength, (b) of other pulsations in praecordium, (c) of pulsations outside of praecordium; 3. The vibrations, (a) thrill, originating in the circulatory system in heart or vessels, (b) friction originating outside of the heart. Under palpation, we must not forget examination of the liver, which must be made in many cases; nor must we forget to look for oedema of the extremities.

Percussion is frequently of little value because of the variations in the condition of the surrounding lungs. An attempt should be made to mark out the right and left borders of the heart. The lower border and base cannot be satisfactorily outlined, but often a decided increase in the width of the heart can be easily elicited, and also as to whether the increase is to the right or to the left. The greatest value of percussion is in determining the outline of the heart, the detection of pericardial effusions, of aneurism, of aorta, or the presence of mediastinal tumors. Mediate percussion is the method usually employed in cardiac examination. The lower border of the liver should also be marked out.

Auscultation, the gift of Laennec, is invaluable. Many practitioners, however, use it to the exclusion of the other three methods. It is only a part of the physical examination, and must be used in conjunction with the foregoing procedures. In following this routine, most diagnoses are made before the stethoscope is applied. Auscultation determines: (a) the heart sounds themselves, as to intensity, rhythm, quality and rate, (b) abnormal sounds associated with heart sounds, first over praecordium, which may be endocardial murmurs, or pericardial friction sounds, second over the vessels. Here clear heart sounds, the presence of murmurs or bruits may be detected. The relationship between the heart sounds and the murmur is of great importance, not only as to time, but also as to the degree to which the murmur obscures or replaces the heart sound.

The stethoscope should be applied successively to the apex region and then move progressively upwards and out to the left axilla, and if a murmur is detected follow it to the angle of the left scapula. Then place the instrument successively at points on the line running from apex to second right cartilage, then upwards to the episternal notch, and down the right sternal edge. Then it is placed in the pulmonary area and down the left sternal edge to the ensiform cartilage. In this way nothing should escape notice. A finger placed on the apex, or on the carotid usually will readily differentiate the first and second sounds.

The stethoscope is a great aid; it clearly conducts normal and abnormal cardiac sounds, does away with friction between the ear and the chest walls, caused by respiratory and cardiac movements, and diminishes to a minimum the congestion caused by a stooped and crouching position,

and adds greatly to the dignity and comfort of the physician. Monaural and binaural instruments each have their own advantages, but the binaural is better suited for general use, and the stethoscope has many limitations which have been carefully studied and described by Lewis A. Connor (*N. Y. Med. Jour.*, July 13th, 1907), and should not be relied upon entirely. In these days direct application of the ear is so little taught in our colleges that the young physician is lost if he has not his stethoscope at hand, and can detect nothing without it. A change of posture must be tried before diagnosis is justifiable. No procedure in physical diagnosis is more important than the change of posture during auscultation. Murmurs appear and disappear, change in quality and intensity and in lines of transmission, and the examination is not complete until a change in posture is made. First it is made in the erect position, then the recumbent. The recumbent posture is particularly valuable in demonstrating a slight incompetency associated with a mitral stenosis.

Next in importance is exercise. This should be instituted in all doubtful cases and where the sounds are obscure, distant or indistinct. Another valuable procedure is to have the patient take several long quick breaths, full expiration, and refrain from inspiration until told to breathe again. The heart should be auscultated at the height of inspiration. Rest also furnishes interesting phenomena; how often we find a murmur disappear after a moment's rest, only again to reappear when exercise is resumed.

The role played by the sphygmomameter and sphygmograph is limited; they are not in common use, and yet they have a great value.

Stanton's modification of the Riva Rocci is easy of application, and affords accurate information as to the blood pressure and arterial tension. Nothing has led to more surprises in this study than the use of this instrument, and I believe those who can accurately estimate blood pressure and the condition of the arterial wall by the palpating finger are few. The instrument proves of greatest value when the question of treatment is considered. The sphygmograph is too delicate for routine use. The cardiograph is little used either in private or hospital practice.

So far we have been considering the methods of procedure in order to insure accuracy in diagnosis. Let us now try to group our findings and endeavor rightly to

interpret them. We are here dealing with valvular disease prior to disturbance of compensation, and these cases are not always easy to diagnosticate.

Differential diagnosis of organic and functional murmurs:

FUNCTIONAL.	ORGANIC.
1. Almost invariably systolic.	1. May be systolic, presystolic, or diastolic.
2. Usually soft blowing except at pulmonic area where it may be rough and loud.	2. May be of any quality. Soft blowing, or loud. Rough blowing, or musical.
3. Frequently associated with venous hum in neck.	3. Not associated with venous hum in neck.
4. Most frequently associated with marked anemia.	4. Not necessarily associated with anemia.
5. Displacement of apex not likely present.	5. Displacement of apex likely present.
6. The murmur is not associated with change in other valvular signs e. g. No accentuated second pulmonic is present with the haemic apical murmur.	6. The murmur is associated with other physical signs as accentuated second pulmonic with organic mitral insufficiency.
7. Murmur usually clears under appropriate treatment.	7. Murmur persists in spite of treatment.
8. Murmur disappears under postural changes, recumbent, etc.*	8. Murmur frequently not removed by postural changes, or exercise, etc.
9. Murmur and sound are both audible and are close together.	9. Murmur may replace the sound entirely.
10. No factor found as cause for organic lesion. History of anemia, fright, shock, etc., is present.	10. A good etiological factor usually obtainable.
11. Liver normal in size.	11. Even in early stages before compensation is disturbed, an enlarged liver may be outlined.
12. Murmur changes location and lines of transmission from day to day.	12. Murmur usually constant in location and quality, but not invariably so.
13. Haemic murmurs are frequently multiple.	13. May be multiple and yet each lesion shows its typical sign—complex.

As a means of differentiating organic and functional murmurs, Stern's position* should be mentioned. This position is obtained by inserting a pillow under the buttocks and raising the hip while the shoulders and head rest on the examining table. That is—the patient's chest is at an angle 30° to horizontal. Stern claims that in this posture normal heart sounds become less distinct, organic murmurs become louder and more pronounced whilst functional murmurs become less distinct or disappear.

My experience with this position has been very limited, but insofar as I have tried to prove it, it has been of some value.

*Munchener Med. Wockenschrift, April 30th, 1907.

Many factors must be considered, and though no one sign is infallible, yet by a careful consideration of all data an accurate diagnosis is obtainable. Occasionally time must be employed, and it tells its own tale, though it is often humiliating to have to resort to it.

The list of valvular diseases furnishes too much for one evening's study, so we will consider only the early stages of three most common forms, e. g., mitral incompetency, mitral stenosis, and aortic regurgitation; and as symptoms are of so little value we will only take up etiology and physical examination.

I. Mitral Incompetency.—Etiology. In this disease, two separate conditions are found, and their etiology will be considered separately.

1. Incompetency due to changes in the valves themselves. This is usually due to endocarditis and gives rise to thickening of the edge of the valve—to shortening and thickening of the chordae tendinae, and consequently non-apposition of the edges of the valves, so that the valve leaks and is incompetent. Under the etiology here we have rheumatism, tonsilitis and growing pains, scarlet fever, etc., and the condition is usually progressive, so that eventually only a hard, firm, unyielding rim protects the auriculo-ventricular opening. Now it is in this form that some obstruction to the flow of the blood from the auricle to the ventricle is encountered, giving rise to a slight presystolic murmur as well as the systolic regurgitant murmur. This presystolic murmur points entirely to true valvular disease, and is the only positive phenomenon on which a definite diagnosis of involvement of the mitral valve itself, as the cause of the incompetency, can be based.

2. The second class is mitral incompetency without damage to the valve. This is usually found during or after prolonged exhausting fevers, or secondary to disease of the aortic valve, or it is due to dilatation in continued high tension in the left ventricle. As the ventricle dilates, the mitral ring dilates, and the valves are not long enough to meet; consequently the blood regurgitates between them. The valves are normal but inadequate. We need not study this class further, as the prognoses and treatment depend entirely on the primary condition.

In physical examination there are many things of importance. Inspection shows apex displaced outward and may be down, and usually pulsation in the cervical or epigastric regions, or in the episternal notch, whilst palpation gives little information except as to character of heart beat, and in this stage the heart beat is usually strong and forcible. Dulness as elicited by percussion is increased laterally mostly to the left, even beyond the left nipple line.

Auscultation is of chief value here—a murmur systolic in time, soft, blowing in character, as a rule detected at the apex and in a typical case can be followed up and out into the left axilla, and even to the angle of left scapula. But this is not sufficient, for such a murmur could be haemic. Just as important is the markedly accentu-

ated second sound heard in the pulmonary area. In every case this should be looked for. Many auscultatory variations in the quality, strength and lines of transmission are encountered, but the great majority of cases of true organic mitral regurgitation conform to this picture:

1. Soft blowing systolic murmur, best heard at apex, but transmitted to axilla and to angle of left scapula; 2. Accentuated pulmonary second sound; 3. enlargement of the heart—apex displaced downward and to the left, so that inspection and auscultation afford the greatest information in this condition.

II. Mitral stenosis is most frequently met with in young people and more often in women than in men. In over 72 per cent. in a series described by Broadbent, frequently no cause is found. Acute endocarditis is the commonest cause, rheumatism and chorea play a part, as do also chlorosis and whooping-cough. It frequently is a late development, and appears after an existing regurgitation, as just described in the previous lesion.

Physical examination: The apex is usually not displaced so far to left as in regurgitation. The disease is most frequently seen in the young, which is the age at which the chest wall most readily yields to pressure, so that a bulging is common. Because of hypertrophy of the auricle a pulsation in the third and fourth interspaces just to the left of the sternum can often be seen. But here palpation proves its value. A thrill at apex is almost constantly found. This is presystolic and ends in the sharp, snappy, sudden shock synchronous with the apical impulse. The thrill is usually coarse and grating and detected without difficulty. The snappy character of the impulse is also of great diagnostic importance. Little beyond increase in lateral dullness comes from percussion, but on applying the stethoscope a rough, loud presystolic murmur is heard, ending in a decided loud snap, which is the first sound. The second sound may be scarcely audible. It is justifiable to make a diagnosis from palpation alone with a mental reservation of the Flint murmur of aortic regurgitation. The second pulmonary is accentuated in this condition also. Before leaving this interesting condition embolic symptoms and aphasia should be mentioned, as perfectly compensated stenosis may exist after these phenomena have occurred and entirely disappeared again.

Here, then, the chief clinical findings are: 1. A presystolic thrill, rough grating, felt

in fourth or fifth interspace inside nipple line, ending in 2. A sudden, snappy shock synchronous with ventricular systole; 3. A rough presystolic murmur heard in and usually limited to the area of thrill, ending in 4. A loud, snappy first sound at the apex. 5. Accentuation of second sound in pulmonary area.

III. Aortic Regurgitation. — It was Corrigan who first carefully studied and described aortic regurgitation, and his name is always associated with the disease. Like mitral regurgitation, two classes may be considered: 1. That in which the valve leaflet is deformed; 2. That in which the valve leaflet is normal, but the aortic ring is enlarged, thus causing non-apposition. The stretching of the ring is usually the result of atheroma and dilatation of the arch of the aorta, so that the incompetency is only relative. Usually four groups are considered:

1. Arterio sclerotic group is the largest and most important; a slow sclerosing process results in curling and deformity of the valve; this in turn is brought about chiefly by (1) strain; heavy strenuous work or over indulgence in athletic sports; it is known as an athlete's heart; (2) syphilis; induces early arterial changes and is recognized as a potent factor in initiating valvular sclerosis; (3) alcohol; directly promotes sclerosis and raises arterial tension. Over eating, resulting in gout, also plays a part. It was this group that Osler ascribed to the worshipers at the shrines of Venus, Bacchus, Mars and Vulcan.

2. Endocarditis may produce an acute insufficiency, and this I think is more common and more important than is taught in our text-books. This winter it has been my privilege to study five cases of aortic regurgitation in adolescence. These all gave a rheumatic history and suffered from articular pain which I considered to be rheumatic.

3. Congenital mal-formation of valve, which is rare.

4. Rupture of valve, usually of a diseased valve. I had the pleasure of studying a case that Dr. J. C. Wilson exhibited in his clinic, in which he considered the probable cause of the lesion to be due to rupture of a leaflet.

Just in passing: This condition presents a group of symptoms, if any be present, different from the other lesions.

Headache, vertigo, a feeling of faintness on rising quickly, and flashes of light are most common. Pain, constant or paroxys-

mal, as angina pectoris may be the chief complaint. But the most extreme incompetency may give rise to no symptoms. The study of this lesion affords the best and most interesting problem in physical diagnosis. Inspection reveals bulging in young subjects and a greatly displaced apex, often as far out as the nipple line in sixth and seventh interspaces.

Palpation discloses a strong, forcible, heaving impulse, and frequently a thrill, presystolic at apex accompanying a Flint murmur. Percussion shows a greater increase in the area of heart dulness than any other lesion, so that this heart is frequently called the *Cor Bovinum*.

On listening over the aortic area a diastolic murmur is heard. This is usually best heard here, but sometimes only feebly, but is better heard in its lines of propagation, down the sternum, or even over in the left axilla. The character of the murmur is frequently distinctive, being long drawn and prolonged. It may replace or accompany the second sound, whilst a slight systolic murmur often accompanies the first sound at the aortic area. At the apex the presystolic Flint murmur is often heard. Care should be taken systematically to examine the aortic area wherever a presystolic murmur is discovered at apex, as in many instances it is considered a mitral stenosis, whereas in reality it is traceable to aortic insufficiency.

The vascular phenomena deserves separate consideration. The throbbing of carotids, brachials and temporals immediately attract attention. Not only does the brachial pulsate, but the entire vessel seems to move and sway under the force of each pulse wave, and gives rise to the condition called locomotor pulse. The abdominal aorta, femorals and all superficial vessels share in the visible pulsation. Capillary pulsation is also present and is easily detected by slight pressure on the finger nail, by drawing a line on the forehead, or by placing a glass slide against the mucous membrane of the lip.

Corrigan noted and described the palpable characteristics of the pulse which bears his name. It is often best appreciated by grasping the arm above the wrist and holding it up. The pulse waves strike the palpating finger with sharp jerking impulse and immediately recedes.

Aortic incompetency presents a definite group of signs: (1) The greatly displaced apex beat; (2) a long drawn diastolic murmur heard at base of heart and best in the

aortic area; (3) pulsating vessels in the neck, and the (4) water hammer pulse of Corrigan.

THE TREATMENT OF CANCER BY MEANS OF THE X-RAYS*

By George E. Pfahler, M. D.,
Philadelphia, Pa.

In the minds of clinicians, this subject includes epithelioma, carcinoma, and sarcoma. I shall therefore consider the subject under these separate headings, keeping in mind more particularly the needs of the general practitioner. With the clinician, three questions arise:

1. What is the diagnosis? 2. What is the prognosis? 3. What is the best treatment?

From the demonstration of about eighty lantern slides, illustrating the results obtained from X-ray treatment, we can take for granted that the earlier a diagnosis is made, and proper treatment instituted the better will be the results. Having made a diagnosis, the following question arises: "What form of treatment will be most likely to cure, with the least chance of recurrence, and with the least annoyance to the patient?"

EPITHELIOMA.

1. Epithelioma Involving the Skin. In this class the Roentgen rays can surely claim first place. They will cure practically 100 per cent., if treated early, when only the skin is involved, and this will occur without pain and often without leaving a scar. It usually requires about three months' time, and from six to a dozen treatments, though no rule can be established. After a few weeks, an inflammatory reaction develops which is followed by improvement. Crusts usually form repeatedly and desquamate, each time leaving a smaller ulcer until the lesion is healed.

2. Epithelioma Involving the Mucous Membrane. In this class, surgery must always be considered, and usually it is better to operate and let this be followed by a course of Roentgen-rays treatment. Occasionally, when an epithelioma first forms upon the lip, if treated early, it can be cured by the rays, but when the epithelioma extends into the deeper tissues of the lip, cheek, tongue, tonsils, vagina, penis, etc., it should be operated upon at the earliest possible moment, for delays are dangerous,

and in this class I would advise against any delay by the use of the Roentgen rays, pastes, or anything of the kind.

Post-operative treatment in these cases, we believe, aids very materially in preventing any recurrence. It is the general experience that the lymphatic glands are involved earlier than is supposed and to a greater extent than can be detected by palpation. This explains many failures from surgical treatment. Such failures could often be prevented if the glandular area were always treated after operation by means of the Roentgen rays, and if for any reason the operation must be delayed the rays should be used before the operation.

CARCINOMA.

1. Carcinoma of the Deeper Tissues. Under this heading, I would include all except the visceral carcinomata, but we would have in mind particularly the carcinomata of the breast. So far as we know, very few of this class have been treated primarily, and then usually in the last stages. On this account, we are hardly able to draw definite conclusions, but for the present, at least, we should advise prompt excision and post-operative X-ray treatment. By this means, small, invisible, and non-palpable glands may be controlled and recurrence prevented, but the treatment should be given with the earnestness based upon the assumption that such glands are involved. If for any reason, post-operative treatment can not be given immediately, it should be given actively at the earliest sign of recurrence. On this account, the family physician should examine the patient thoroughly at regular intervals, and not wait for the patient to request such examination. Patients must not be expected to know as much as the physician.

2. Carcinoma of the Viscera. Under this class, we think of carcinoma of the stomach and uterus as examples. Here little has been accomplished, to date. A few cases have apparently shown remarkable benefit. We may often expect retardation of the process and relief of the pain.

SARCOMA.

The general impression has been given that sarcomata have not yielded at all to Roentgen-rays treatment. This must be an error. My most successful results obtained in the treatment of deep-seated tumors have been in sarcomata. A review of the literature shows that only the most advanced and inoperable or recurrent cases have been treated, but even in some of these hopeless cases the most remarkable results have been

* Read by invitation before the Burlington County Medical Society, September 9, 1907.

obtained. Probably the best results in the treatment of sarcoma will be obtained by combining surgical and X-ray treatment, and in every case there should be a consultation between the Röntgenologist and the surgeon, and this should take place before the operation. In most cases, it will probably be best to give a course of X-ray treatment both before and after operation. A decision upon this point can best be reached by considering the history and conditions found in each case. Rules can not yet be established.

Finally, the results obtained by Röntgen treatment will depend very much upon the technique, skill and judgment of the Röntgenologist. I believe that, as a rule, the general practitioner has neither the time nor the opportunity to prepare himself thoroughly for good work in this line. To familiarize yourself with the literature of the subject and to obtain the necessary skill will require your entire time. Further, the danger to the operator makes considerable protecting devices necessary which is not likely to be a part of the ordinary office equipment. These points should be thoroughly investigated before purchasing an instrument, for the mere possession of an instrument does not mean equipment for good work any more than the possession of a set of surgical instruments means equipment for good surgery.

The above paragraph is written because smooth-tongued salesmen often mislead practitioners, and once damage is done, it is often never undone.

SUDDEN DEATH IN EARLY CHILDHOOD.

By Arthur Stern, M. D.,
Elizabeth, N. J.

During the first two years of life there occur certain sudden deaths in apparently healthy children, which, up to the last fifteen years, have puzzled the medical world.

Paltauf, in 1889, found, that in a number of these cases the autopsy showed a very strongly developed thymus gland and advanced the theory, that these cases were traceable to a certain abnormality of the constitution in children with an unusually large thymus gland, involving diminished resistance to infectious agencies, and causing a susceptibility to death from minor influences.

I quote from Friedjung in Pfaundler's new Handbook of Children's Diseases, Leip-

zig, 1906, who gives a concise description of the pathological findings at the autopsies of these children. "We find in the bodies of these children an enlargement of most of the thymus glands, the tonsils, the follicles, and what is more important, thymus glands of different sizes, especially in an age at which, as a rule, the thymus gland has disappeared. Furthermore, we find a narrow aorta, and a poorly developed arterial system, signs of acute dilatation of the heart, which means a large, flabby, pale heart, showing signs of muscular degeneration."

The condition here adverted to is called status lymphaticus, or thymicus. Pot and Escherich accepted this theory and helped to make it popular. Kassowitz in Vienna supported it by pointing to the sudden deaths following facial eczema and to those cases of rachitis which are combined with laryngospasmus and which also terminate fatally.

The popular idea, that eczema of the face should not be treated, or, if removed by treatment, may be followed by severe internal symptoms, is not without foundation. There is no doubt that some of these eczematous children suffer from status lymphaticus, and there is a peculiar relation between scrophulosis, tuberculosis, rachitis and status lymphaticus, which is still obscure, but the investigations of the last ten years have contributed data which promise much enlightenment.

An instance which shows this peculiar relationship, although the case does not belong properly to the group of enlarged thymus gland, is the following, which occurred in my practice. A year ago I was called to see a child, one year old, suffering from a well-developed eczema of the face. The child's mother had died post partum, from tuberculosis. The child was rather anaemic, and the eczema was very obstinate. Finally the eczema disappeared; while it was subsiding, the child stopped playing, developed temperature and died within a few weeks of tubercular meningitis.

As to the diagnosis of these cases, there is no doubt that the thymus gland can easily be recognized by percussion of the sternum.

The thymus by percussion shows itself as a triangle with a base between the two sterno-clavicular joints, the apex of the triangle reaching to the middle of the second rib. An enlargement of this area means an enlarged gland. I have now a case under my observation where this enlargement can quite readily be shown by percussion.

Elizabeth W., 14 months old, born in Hungary, suffering from rachitis, had first attack of laryngospasmus on January 10th, 1907, and another one a week later. (Two years ago another child died from convulsions.) The large area of flatness of the thymus site is very apparent in this case.

The question which now confronts us is, Does the enlarged thymus gland cause death, and if so, in what manner? The theory that the gland causes death merely by reason of its size can hardly be accepted, as it always is connected to the neighboring organs by loose fibrous tissue. Paltauf's idea that these children with enlarged thymus glands are more subject to infection and other constitutional diseases, seems hardly more plausible, as death almost always takes place instantaneously; but it seems that in all these cases the death is a real heart death, by which I mean that an accompanying chronic myocarditis caused by some unknown agent is the real and immediate cause of dissolution. It seems to be an autointoxication with degeneration of the heart caused by the toxins formed in the thymus gland.

Such children take chloroform badly, and there are a great many cases on record where, after the first inhalation of chloroform death immediately ensued. It seems to me, therefore, that in children, if a narcosis is necessary, the thymus gland should first be subjected to percussion, and if a large area of flatness be detected, chloroform should be avoided, and probably ether substituted.

The cases which have come under my observation are the following: W., female, age eight months and a few days, weight 15 pounds; mother played with child shortly before; went to the cellar, and when she came upstairs her little boy said, "Mother, look at the baby." She saw the child turning blue; immediately opened the child's mouth with her finger, but did not find anything; the child turned white and stopped breathing. The mother states that the whole affair lasted about one or two minutes. I arrived about one hour later. The body of the child looked extremely white, mouth and pharynx were free. Mother, when young, suffered from scrophulosis. One of her children, three years of age, had an attack of pleurisy with effusion. I at that time introduced the aspirating needle and found a serous exudation. This was absorbed in about two weeks, but the child did not seem to rally, and within two weeks developed tubercular meningitis. Another

child now suffers from an eczematous condition of the eyes and the glands of the neck.

A few years ago I was called early in the morning in haste to a child which the parents said was suffering from convulsions. When I arrived, I found the child dead. The child was about two years of age, and the mother told me, that it had been perfectly well and had been playing all morning. All of a sudden she noticed the child turn blue, then white and stopped breathing. The body of the well-nourished child seemed very anaemic. The mother, who suffered from a cleft palate, has since died.

On April 5th, 1906, L. Rehn read a paper before the 35th congress of the German Society for Surgery on thymus stenosis and thymus death, with a report of one operation performed by himself on a child four months old for laryngostenosis due to an enlarged thymus gland. The child suffered since birth from difficult breathing, which increased, when the child cried or became excited. An incision was made from the larynx to the sternum. The deep fascia was incised and the capsule of the thymus gland, which in this case reached to the isthmus of the thyroid gland, showed itself. The thymus gland was pulled up with two forceps and a piece the size of a walnut removed. After the operation all respiratory troubles disappeared.

Rehn believes direct pressure to be the cause of all thymus deaths. He closes his article with the following remarks: I. A large thymus gland can make pressure on all organs of the mediastinum. II. This pressure injures in most cases the air passages, but rarely heart and blood vessels. III. The tracheo-bronchostenosis thymica is a disease proved to exist clinically and by autopsies. It occurs more frequently than we know of. IV. The disease shows various stages, from slightly disturbed respiration to sudden deaths due to total compression of the lungs. V. The stenosis can show itself suddenly or gradually. VI. It can heal spontaneously, or kill at the first attack. VII. Several cases occur frequently in the same family. VIII. Even the mildest forms are doubtful in prognosis. IX. As soon as a stenosis appears to exist, we should operate, but we do not know yet if we should operate from prophylactic reasons. X. An operation must consist if possible of an extirpation of the gland. XI. The thymus operations up to date were not alone accompanied by the best results, but

are also relatively simple, not dangerous, and technically easy. XII. Narcosis is not necessary for this operation.

THE HYGIENE OF THE ORAL CAVITY.*

By Henry H. Sherk, M. D.,
Camden, N. J.

Oral hygiene is the beginning of cleanliness of the corpus internus; if the mouth is kept in a healthy condition, it is possible to ward off many unseen dangers that lurk in the oral cavity ready at any moment to find a nidus, to multiply with great rapidity, and possibly cause one or more of the infectious diseases, the etiology of which we are at a loss to fathom.

In discussing this subject I will take into consideration the lips, tongue, teeth, buccal cavity and tonsils as the portions of anatomy that comprise the oral cavity. I am of the opinion that a large number of the preventable diseases are transmitted through the mouth to the stomach and various organs, spreading their bacteria into the nose, larynx, trachea and bronchi, and, as is well known, permitting their invasion into the lymphatic system. The mouth is an ideal incubator for micro-organisms.

Power, in the *Journal A. M. A.*, August 4th, 1906, states that in neglected mouths 1,140,000,000 cultivatable bacteria have been found, that even in the average mouth each drop of saliva contains 4,375 micro-organisms. Those that most commonly exist are the staphylococcus pyogenes aureus, streptococcus pyogenes albus, and that in 15 per cent. of the healthy mouths the diplococcus of pneumonia were present.

Kirk, of the University of Pennsylvania, found this diplococcus in the nerve canal of the tooth. Since the discovery of the germ theory of disease, the profession has struck the keynote of preventive medicine, namely, prophylaxis. The preservation of the race depends largely upon it. All honor to such men as Pasteur, Lister, Virchow and a host of others who have by their scientific work made medicine what it is to-day, put us on the highway of truth, led us to drink at the fountainhead of knowledge and there begin to learn the A B C of the science of medicine.

Hericourt's advice to prevent disease rather than cure it, is a step in the right

direction, for the medicine of the future will be to a great extent prophylactic.

Some time ago a prominent gentleman consulted his physician for some ailment he had, and, after a careful examination, his medical adviser diagnosed a case of syphilis. The gentleman strenuously denied infection from the usual source, and from the history of the case, together with his clean life, the cause had to be traced to another source. His physician tried all means at his command to find the cause of infection, but without success, until he accidentally asked him where he usually dined. He told him at a certain restaurant on Chestnut street, Philadelphia, but for some reason he had lately discontinued going there. The doctor, following up the clew, asked why. His answer was that he did not like one thing that occurred there, namely, that he noticed that the cashier when he paid his bill was in the habit of chewing toothpicks and placing them on the desk. His physician then asked the patient if he would accompany him to the said restaurant, which he gladly did. He went to the proprietor and informed him of his errand and asked to be allowed to examine the cashier's mouth, which he found to be full of mucous patches. The cashier was discharged, but how many cases of syphilis he infected no one knows. The lips form the guard to the oral cavity, and it is there that we must commence our prophylaxis.

Kissing, General and Promiscuous.—

Could any one see the secretions loaded with micro-organisms imprinted on the lips of the dear little infant by the inevitable kiss, they would stand in holy horror and wonder why nature was so kind in preventing the spread of one or more of the infectious diseases. If the baby must be kissed, let us resolve not to kiss it on the mouth or let any one else do so.

The propriety of kissing is a great question from a sanitary point of view. It has been a mode of showing affection from time immemorial, and no doubt will continue to be, but in the light of the knowledge we possess, it should be curtailed at least to this extent: "Be sure you are right and then go ahead." But, seriously, I am persuaded that kissing is a prolific source of contagion and infection, and that such transmitted diseases as syphilis, etc., are caused by this habit. Therefore, let us invent some sanitary method to express our feelings.

Telephones.—The use of the telephone should also demand consideration. There is

* Read before the Camden County Medical Society, October 8, 1907.

no doubt but that there is a hidden danger which is not seen on the transmitter of the instrument. Care should be exercised not to let the lips come in contact with the parts.

Drinking Cups in Public Places.—The new appliances introduced in our public schools to do away with the regulation drinking cup mark a great sanitary advance, and will do much to lessen the spread of disease.

The Communion Cup.—From a sanitary point of view the communion cup is unhealthy and no doubt is a prolific source of infection.

Improper Feeding.—Improper feeding is the cause of an early decay of the milk teeth. This is especially true in those cases that are fed on the so-called dead foods, such as condensed milk, etc., that do not contain the proper elements of nutrition in their composition. Therefore, it is incumbent upon the practitioner to pay particular attention to the feeding of the child and keep in mind the development of the teeth, and to follow the index that nature shows when proper nutrition is interfered with.

The following diseases affect the mouth per se, namely, stomatitis, catarrhal stomatitis, ulcerative stomatitis, aphthous stomatitis, parasitic stomatitis, gangrenous stomatitis, mercurial stomatitis, angina Ludvigia or Ludwig's angina, an infective inflammation of the floor of the mouth and of the cellular tissue of the deep cervical fascia, probably due to the infection of the streptococcus pyogenes, perliche, a contagious disorder consisting of fissures of the angle of the mouth, in which pain and itching are present, and the child licks the part to allay the burning and itching—hence the name. This disease is spread by the use of drinking cups. Salivary calculus, alveolar gingivitis, pyorrhoea alveolaris, commonly called Riggs' disease, due to a separation of the gums from the teeth, and an inflammatory condition of the same combined with bacterial infection and an excess of tartar. Alveolar abscess, tumors malignant and benign.

Among the infectious diseases traced to micro-organisms found in the mouth may be enumerated: Tuberculosis, influenza, acute rheumatic fever, chorea, diphtheria, scarlet fever, pneumonia, pleurisy, measles, erysipelas, typhoid fever, endocarditis, pericarditis, cervical adenitis (tubercular), appendicitis, cerebro-spinal meningitis, Hodgkin's disease, pseudoleukemia, pyemia, septicemia, septicopyemia, actinomycosis, eri-

themianodosum, cryptogenic jaundice and Vincent's angina.—*New York Journal*, August, 1906.

In view of this appalling number of diseases, and the fact that in most cases they are preventible, does it not follow that we as conservers of the public health should use our greatest endeavors to preach the gospel of oral prophylaxis and hygiene? This should commence in the cradle, for, like all other great things, we must start at the beginning. "Bring up a child in the way he should go and when he is old he will not depart from it."

The Care of the Newly Born.—As soon as the child is born the mucus should be gently wiped from the mouth with sterile cotton and water, using no force under any circumstances. If it is a breast-fed infant the nipples of the mother should be carefully examined and properly cleansed with sterile water. If there are any cracks or fissures they should be treated, and the baby allowed to take its nourishment through a shield. This shield should be strictly clean, being placed in a solution of sterile bicarbonate of soda, and when ready for use rinsed in sterile water. By so doing, stomatitis in its various forms can be prevented. If unfortunately the child must be fed on any of the artificial foods, then the greatest care should be taken with the bottle and nipples, the details of which we all know.

I do not think that the promiscuous washing of the oral cavity with the various solutions, as boric acid, etc., should be encouraged, as they do more harm than good by setting up more or less inflammation. This is especially true if there are present small pearls of follicular stomatitis, for once these pearls are ruptured by force a general stomatitis may follow.

After the child is old enough it should be taught the evil of putting things in its mouth. We all know the danger of this pernicious habit, but they all do it. Is it not a wonder that there is not more disease? Possibly the majority of us overlook the etiology of a number of ailments which could be traced to this cause. Keeping in mind the number of bacteria on the floor, among others the bacillus of tetanus, might not some of the so-called idiopathic cases of lockjaw emanate from this source? As soon as age will permit, the child should be taught the use of the tooth-brush. In fact, after the eruption of the first tooth it should be used after each meal, and a good powder, free from acid and grit, should be applied. The first thing in the morning and the last

thing at night the mouth should be rinsed with an antiseptic wash of which the liquor antisepticus alkalinus N. F. is a good type. Candy should never be allowed except after meals, and then in small quantities. The cheap candies sold at the various stores should be positively prohibited from being used and drastic measures should be taken by the health authorities to compel the stores to sell none but pure goods. Notwithstanding the recent enacting of the pure food laws, I am persuaded that the candies found on sale at the various marts are not fit to be used, and are a menace to the thousands of children who daily consume them.

The taking of acids through a glass tube is detrimental to the teeth and does more damage to them than the act of direct deglutition, for in the act of swallowing the draft is regurgitated to the front of the mouth and thereby comes in direct contact with all the teeth. This could be avoided by swallowing the medicine direct, and then washing the mouth with water. The teeth should be examined frequently by the family dentist and any caries noted and attended to. Imagine a child with a mouth full of decayed teeth, containing numerous germs in their cavities, taking such germs into the stomach and into the lymph channels to multiply, and if perchance a lowered vitality exists in the system to usher in one or more of the infectious diseases which may cause death or serious sequelae.

The South Jersey Dental Society has taken the initiative in the work to have the State Superintendent take up the question of oral hygiene and prophylaxis, but owing to the many other duties the powers that be have paid no attention to this important matter. The secretary has corresponded with every superintendent of public instruction in the several States of the Union, and while he received encouragement from some, others did not pay any attention to his plea. In answer to the question, Do you give any attention to the examination of your pupils in regard to oral hygiene? the answer was, "Yes, but not orally."

The following form is suggested for use by the dental society in the public schools:

Examination of the Child.—Name of school? Town? County? Sex? Harelip? Cleft palate? V-shaped arch? Has this child a tooth-brush? If "yes," is it used daily?

Then there is a diagram bearing the number and location of the teeth, those that are decayed are marked on the diagram and are recommended to be filled.

If more attention were paid to this important subject by the laity as well as by the medical profession, the authorities would be obliged to acknowledge the power of a united people, and especially the medical profession, who, more than any other force, work for the perpetuity of the race. May the time soon come when every child in this vast domain shall be taught and made to practice the simple alphabet of hygiene and prophylaxis of the oral cavity and remember that the principles of health are as important to the preservation of posterity as are the rudiments of education, for no one is capable of doing his best unless his health is in good condition.

OBSTETRICAL AND SURGICAL CASES.

By John F. Hagerty, M. D., Newark.

CAESAREAN SECTION—SUBSEQUENT MYOMECTOMY—NORMAL LABOR EIGHTEEN MONTHS LATER.

The operation of Caesarean Section is no longer a rare occurrence and myomectomies are done frequently enough, but it is not often that one has the good fortune to deliver a patient *per vias naturales* on whom both of these operations had been done and this must be my excuse for reporting the following case:

Mrs. S., age 33, primipara, engaged me in September, 1905, to attend her in labor, saying she expected to be confined in December. She was last unwell in March, had always been in good health before and had noticed nothing wrong during her pregnancy. Patient visited me frequently during the following months and several examinations of urine were made which proved negative. Bowels moved regularly. No vaginal examination was made. I was sent for December 23, 1905, about 5 A. M., patient having been in labor a few hours, and was very much surprised on making a vaginal examination to find a large, solid tumor entirely filling Douglas' pouch, displacing uterus forward and upward, so that cervix could scarcely be felt and bulging posterior vaginal wall forward to vulvar opening. A diagnosis of fibroid tumor was made; an unsuccessful attempt made to shove tumor out of pelvis with patient in knee-chest position and Caesarean operation advised. This was done five hours later in patient's home, with the assistance of several medical friends. The operation was done in the usual way, a healthy female child weighing six and a half pounds extracted, uterine wound closed with double row of chromic gut sutures and patient returned to bed in good condition. The cause of the obstruction was found to be a fibroid tumor on the posterior wall of the uterus, but owing to hurry in preparation the subject of removal of growth was not thought of at the time. A few points of interest connected with the operation may be worth mentioning, viz: Care should be taken in making the abdominal incision not to enter uterus and possibly injure the child; the comparative thinness of uterine wall; the very rapid contraction of uterus after escape of liquor amnii and withdrawal of child, thus effectually controlling hemorrhage and making the closing of uterine wound comparatively easy.

The patient having been informed of the dan-

ger of again becoming pregnant, desired removal of the growth which diminished in size, very little, if at all, after operation, and she was admitted to St. Michael's Hospital, where, on May 27, 1906, the abdominal wound was reopened and the tumor, which proved to be a sub-serous growth about the size of a fetal head, and several small nodules were removed. The uterine wounds were closed with chromic gut sutures, the largest with double row, abdominal wound closed in usual way and patient returned to bed in good condition. The scar of the Caesarean operation could scarcely be seen. Patient recovered nicely from operation, leaving hospital May 14th feeling entirely well.

Patient menstruated the first time after myomectomy in June and regularly afterwards until December 2nd, when it was soon known that she was pregnant. Nothing unusual was noticed during pregnancy and her approaching labor was looked forward to with a good deal of interest. Patient was taken in labor September 8, 1907, about 7 P. M., and I saw her shortly afterwards. Child in L. O. A. position, cervix slightly dilated and very rigid. The first stage was very tedious, lasting nearly three days, and during most of the time pains were very severe. On September 11th a female child, weighing ten pounds, was born. Puerperium was normal and patient was up and about two weeks afterward. It is really wonderful how a uterus with large scars on anterior and posterior surfaces could accommodate the growth of a large child and aid in successfully expelling it.

LOOSE KIDNEY.

Clinic of the N. Y. Post-Graduate Medical School.
(From the *Medical Review of Reviews*, N. Y.)

By Prof. Robert T. Morris, M. D.

CASE OF LOOSE KIDNEY. This young woman has a loose right kidney. Perhaps ten per cent. of all of the women who come into the office have a kidney or two loose. Are we to operate upon ten per cent. of all of the women who come into the office for loose kidney? Not by any means. There are some very responsible members of our profession who do not believe in operating for any of these patients. They are quite as wrong as more radical men who would operate in about all of the cases. The time has come when we can make nice discrimination and selection, and it is now possible to anticipate pretty closely the outcome of operative procedure in any given case.

What is the cause for loose kidney? Anything that starts the kidney from its light anchorage. Sometimes a blow, sometimes a lifting movement that forces the liver firmly down upon the right kidney, sometimes rapid absorption of perirenal fat, sometimes general relaxation of the peritoneal supports of the abdominal viscera. In this patient it is believed to have been a fall, that at the same time fractured the coccyx and upset the uterus. Whenever a kidney starts away from its anchorage, gravitation keeps it traveling in retro-peritoneal planes, and it wanders farther and farther away from home, unless we do something to halt it.

What are the symptoms of loose kidney? They are the symptoms of some kinds of eye strain, of some kinds of appendicitis, of some kinds of gastric ulcer, of some kinds of cholecystitis, of some kinds of pancreatitis, of some kinds of neurosis, of some kinds of psychosis.

It becomes very important, then, does it not, to make a differential diagnosis and to place the

blame where it belongs? What is the point of cardinal importance in making the diagnosis? Finding a loose kidney. We do that by any one of several methods. The one which I demonstrate here is satisfactory for most cases. The patient is upon her back. My left hand lifts the quadratus lumborum muscle so that it makes a little shelf inside of the abdomen. My right hand depresses the anterior abdominal wall so that it makes another little shelf. The two shelves approximate one another, leaving just room for the kidney to slip between. Now ask the patient to take a deep breath, and the kidney slips out between the two shelves and rests caudad of the shelves, instead of remaining cephalad, where it naturally belongs. A little skill is required for easing up on the two shelves at just the right moment to let the kidney pass, and then closing the space and keeping the kidney in a trap for a moment.

Sometimes the kidney is somewhere down by the brim of the pelvis when we start in to make the examination. In that case it is poked back to where it belongs, and is then made to range out again. Sometimes the kidney will not range quite far enough to get into our trap, and in that case, if the patient takes an ordinary sitting position and leans a little forward, we can feel the kidney below the liver margin, on deep inspiration, if it is the right kidney that is loose. The right kidney is most often the offender, for the reason that it is most often dislodged by the liver, on lifting movements, or when the waist is constricted by a corset in such a way that the liver moves up and down like the piston of a pump, instead of gliding gracefully through its normal lines of range.

Having found that a loose kidney is present, how are we to estimate the value of symptoms in their relation to the condition? That is sometimes a difficult matter indeed. One patient will have practically no disturbance at all, another will have symptoms out of all proportion to the lesion, and a third will have an intensification of symptoms, due to other causes, but precipitated by the presence of the loose kidney. If we operate for loose kidney in patients who are neurotic by inheritance and by habit, we may gain very little indeed from the operation. If we mistake the symptoms of a psychosis for those of loose kidney, the operation may have the effect of making the patient worse. If we fix the kidney in a case of ptosis, with relaxation of the peritoneal supports of other viscera, we are certain to do an injurious operation unless the other viscera receive operative attention at the same time (including repair of the diastasis of the rectus abdominis muscles) and this makes such a severe operation that one must hesitate about advising it until general abdominal support with apparatus has been given a thorough trial. There are very many cases of eye strain, with hyperaesthesia of abdominal sympathetic ganglia, simulating the disturbance caused by loose kidney. In these cases one usually finds the external evidences of eye strain, or makes out a subjective history pointing in that direction. The first step in such a case is to have that possible factor eliminated by a competent ophthalmologist. Many ophthalmologists of excellent standing are incompetent to work out the features of such a case, and I have had to go over the field pretty carefully in New York. After eliminating the part played by eye strain in any given case, we may then proceed to care for the kidney or to leave it alone.

Many patients are sent to me for operation for chronic appendicitis who are really suffering from one of the effects of loose kidney. Edebohls has shown that when the kidney presses upon the superior mesenteric vein, a congestion of the cæcum and appendix results. In my experience these appendices usually get up protection against infection, but now and then one will become infected and present symptoms calling for its removal. In most of my cases the appendix has been left alone and has behaved properly after the kidney was fixed.

I see a good many cases that are sent in with the diagnosis of cholecystitis, gastralgia, dilatation of the stomach, or ulcer of the stomach. Loose kidney, present in these cases, may be the dominant disturbing factor, or it may really play a minor part, and one has to make an elaborate diagnosis, and by exclusion get the kidney into its proper role. Many loose kidneys rest against the pylorus and duodenum and cause a concatenation of symptoms which will lead most physicians to overlook the kidney entirely. Find the loose kidney in these cases. Support it for awhile with an abdominal supporter and see if we are on the right track. If we are on the right track, many patients will be so much benefited by the supporter that they will not wish to have an operation. Other patients do not love supporters, even though useful, and they prefer an operation. There are cases in which disturbing symptoms are not much in evidence, but in which insidious nephritis of serious character develops, on account of the disturbance of circulation due to torsion or angulation of the vessels of the kidney. Look out for these cases.

Having selected a case suitable for operation, what shall be our choice of method? There are many methods. I have tried all of the types. Some have not proved quite as good as their advocates would lead one to believe. Probably because I was not sufficiently skilled in these methods. A popular method must be one that can be done by unskilled operators. The one that I will demonstrate upon this patient falls into that classification. The operation can be done in about ten minutes, and it is so satisfactory that it becomes one of the operations that one does with pleasure. The patient lies prone upon an inflated cushion which compresses the abdominal wall and forces the kidney well up into normal position. The only instruments required for the operation are a pair of scissors and a needle. No arteries need to be tied as a rule, but once in a while I slip a ligature around one with the needle.

With the scissors a cut is made down to the dexdral border of the quadratus lumborum muscle. The next cut divides the sheath of the muscle along the border. Then we stab the psoas muscle, and open the scissors in situ. That splits the muscle and exposes peri-renal fat. We need to stab the capsule of this fat, and then on opening the scissors in situ a line of cleavage in the fat leads directly down to the kidney, so that one cannot possibly miss it. Authors do not make this point so far as I know. Had I known it in earlier years, it would have saved a great deal of time that was sometimes spent in locating the kidney. We now pull on the peri-renal fat and gradually deliver the kidney upon the outer abdominal wall. The fibrous capsule of the kidney is split longitudinally, to allow the kidney to swell a bit. The suture of Goelet is introduced by entering the needle at the lower pole of the kidney, carrying it in and out conveniently be-

neath the fibrous capsule, following the dorsum of the kidney near the split in the capsule until we get a little above the middle of the kidney. Then cross the split in the capsule and go down again, bringing the suture out near the entering point. The two tails of suture are now used to lift the kidney up beneath the ribs as soon as the kidney has been popped back into place and its peri-renal fat trimmed off. The two tails of suture are passed through any convenient point in psoas or quadratus muscle and tied. Kangaroo tendon is the best suture material, because it is so benign, and because it lasts for so long a time. The next suture unites the cut margins of the quadratus muscle, and you observe that the split muscles fall together naturally. Do not close the caudad portion of the sheath closely. Tie the suture and leave room to run in some iodoform gauze packing in the form of narrow ribbon. Pack this all about the lower pole of the kidney and leave an end sticking out of the wound. That is Senn's point. He has shown that the presence of the gauze invites granulation, and the resulting connective tissue holds the kidney. It also includes Longyear's point. Longyear has shown that we need to hold up the nepro-colic ligament. When the gauze is removed at the end of five or six days the nephro-colic ligament is held up and the retro-peritoneal pouch is obliterated as soon as secondary adhesion unites the surfaces that were held apart by the gauze. The gauze also drains the wound and avoids the necessity for bothering about tying several small arteries that may be cut. It drains away the blood that oozes from the parenchyma of the kidney. The skin wound is closed with the exception of room for the gauze. Simple catgut is best for this suture. When the gauze is removed at the end of five or six days, no further dressing is required, excepting external gauze dressings, until the skin wound closes. Most of these patients sit up in bed in seven days and walk in fourteen days. I have spent eleven minutes upon this case, from the first cut to the last suture, and have worked deliberately and stopped to discuss the steps besides. That is two minutes longer than I spent upon the case of last Wednesday. Operations that can be done expeditiously—operations of any sort—leave the patient with normal resistance unimpaired by the shock and the intoxication that go with longer procedures.

THE FREQUENT INTERDEPENDENCE OF DISLOCATED KIDNEY, GALL BLADDER TROUBLE AND APPENDICITIS.

In a paper read by Dr. Earl Harlan, of Cincinnati, Ohio, at the meeting of the Mississippi Valley Medical Association, Columbus, Ohio, October 8-10, the author stated that a ten-year study of this subject has impressed him with the serious import of dislocated kidney. He discusses the status of "Dislocated Kidney" as a pathological entity capable of producing symptoms of functional and physical derangement, primarily, within the organ itself, and, secondarily, on the part of the stomach, cholecyst, bowel and appendix.

He divides movable kidneys into two classes: First, those with and, second, those without, clinical pathology; *e. g.*, bedside symptoms, and calls those of the first division "Movable Kidneys," in contra-distinction to those of the second class, which he places in the category of "Dislo-

cated Kidney," the latter term being a more suitable pathological expression.

From three to five per cent. of moveable kidneys are of the second class, and therefore demand surgical interference.

He justifies the belief in the minds of those who doubt or scoff at the existence of a movable kidney with a pathology on the ground that, although they may have seen many freely moveable kidneys, they probably have not come into contact with a pathologically dislocated kidney, or, if they have, they have been misled in the diagnosis of the latter. He supports the claim that a "dislocated kidney" may present the clinical picture of gastric irritation or ulcer, obstruction to the bile outflow with attacks of jaundice, partial obstruction of the intestine, or appendiceal irritation or appendicitis, without presenting any symptoms or conditions other than displacement, which would tend to involve the organ itself, pathologically speaking, with a number of reports of misoperated cases.

He cites the recent great work of Suckling, of Birmingham, England, who proved that insanity is often produced by "dislocated kidney," and reports the cure of twenty-one cases who underwent the operation for correction of the pathological displacement. The diagnosis was made in these cases by measuring the amount of kidney excretion and comparing with that of the normal kidney. He also refers to the work of Harris, of Chicago, in establishing the pathology of these cases.

He traces the relationship and pathological dependence of gastric trouble, bile-duct and bowel obstruction, and appendiceal irritation with "dislocated kidney" and emphasizes the great importance of making an exact diagnosis in all cases of chronic indigestion with obscure symptoms and conditions, citing cases, as stated, which had undergone a mistaken diagnosis and having been operated upon for appendicitis or gall stones, wherein the primary lesion was a dislocated kidney.

He says that this lesion more often escapes notice and diagnosis than all other abdominal lesions combined.

He summarizes the salient features of this paper in the following paragraphs:

1. That a dependent pathology, accompanying the primary lesion of "dislocated kidney," gall bladder trouble and appendiceal irritation of a severe nature, are of frequent concomitant occurrence.

2. That many cases have undergone operation for appendiceal or gall bladder trouble, wherein the causative factor was a dislocated kidney, the latter producing pressure interference to the bile outflow or bowel current.

3. That all cases presented for abdominal treatment, complaining of indefinite and recurrent distress, discomfort and pain, these attacks being accompanied with the presence of an excess of stagnant gas at certain points in the bowel, and in which the involvement of the stomach, gall bladder and appendix are more or less equal, should receive the most careful and repeated consideration from the physician, in order that a distinct, differential diagnosis may be concluded.

4. That in the vast majority of instances, a freely moveable kidney presents no pathology on the part of the organ itself, and that this immunity may cover a considerable space of time, after there appear symptoms of functional and mechani-

cal disturbance on the part of the stomach, cholecyst and bowel.

5. That, on account of the wide and uncircumscribed range of pathological symptoms produced by a dislocated kidney, it is more often liable to proceed undiagnosed than all other symptoms producing abdominal lesion.

6. That permanent and complete relief result only from a correction of the primary lesion with its dependent pathology.—*The Virginia Medical Semi-monthly*, November, 1907.

THE USE OF ADRENALIN DURING ETHER ANESTHESIA.

By Charles S. Venable, M. D., Charlottesville, Va.

Some time ago in giving ether to a young man who was to undergo an operation for oblique inguinal hernia, I experienced more trouble from a profuse bronchorrhea than ever before. At the commencement of the anesthetic the patient's respirations were clear and regular, his color was good, and his pulse 84. The anesthesia was, as usual, begun with nitrous oxide gas, followed by ether, using a Bennett's inhaler until etherized, when a towel cone was substituted. Very shortly after the ether was begun the bronchial secretions were markedly stimulated, and so rapidly increased that in ten minutes there was a profuse bronchorrhea. The pulse increased in rapidity and lost volume, respirations became shallow and irregular, and the patient cyanotic. The moment the ether was withheld the patient promptly offered resistance, and when more was administered his breathing was so interfered with by the great flow of mucus that at times respiration would cease.

After trying the usual methods to continue the anesthetic under these trying circumstances, I ordered a solution of adrenalin chloride, and with this mopped out his pharynx. Almost immediately the secretion of mucus became less, the respirations clearer and deeper, and the patient less cyanotic. In a few minutes, however, there was a threatened return of the profuse secretions with the accompanying cyanosis, but by the use of the adrenalin this was again averted. In twelve minutes from the time the adrenalin was first used the throat was clear of mucus, respirations were deep and regular, and all embarrassing symptoms had disappeared. With the improvement in respirations the pulse steadily improved, becoming regular and full. The recovery from the anesthesia was quick and satisfactory. The patient vomited once, but complained of no subsequent nausea.

With this encouragement I determined to use adrenalin in my anesthetics as a routine in a series of cases.

I found that a 25 per cent. aqueous solution of the standard 1 in 1000 gave the best results, and that first pouring ether in the towel cone and spraying the adrenalin solution on it, depending on the ether to vaporize it sufficiently for inhalation, was the best mode of administration. Three to six-minute intervals are sufficient for its use, and a total of from one-half to one ounce of this solution is enough for an operation lasting from thirty minutes to an hour. The effects are a more uniform etherization, the pulse becoming steadier, slower and of better character, more rapidly than under ether alone; respirations are quiet and regular, the bronchial secretions are practically checked, and the progress of the operation is not interrupted.

These cases were not selected, and among them were old alcoholics; two women over 60, one of them nearly 80 years of age. Three were very long, tedious operations, lasting over two hours, and in none of the series was any stimulation required during the anesthesia.

Recovery from the anesthetic was uniformly good; there was practically no postoperative shock, and no stimulation was needed in any one of the cases; only two patients vomited at all, and very little nausea was complained of.

From the foregoing facts I conclude that owing to the contraction of the smaller vessels the bronchial glands secrete less mucus, and there is better aeration in the bronchioles and pulmonary vesicles, less ether is required to produce anesthesia, and there is less probability of ether pneumonia following. The adrenalin, acting generally from absorption, is a powerful stimulant; it materially lessens shock, lessens the capillary ooze at the field of operation, and is of great benefit to the much weakened patient.—*Virginia Medical Monthly*.

THE PROPHYLACTIC USE OF ANTITOXIN IN EPIDEMIC DIPHTHERIA.

By Everitt E. Norton, M. R. C. S. Eng., Medical Superintendent of the Isleworth Infirmary.

(From the London *Lancet*, July 13, 1907.)

Early in the present year diphtheria appeared in epidemic form at the Percy House (Brentford Union) Schools, which are under the management of the poor-law guardians and are situated at Isleworth. There also, upon adjoining sites, are the infirmary and workhouse. The schools are residential, consist of various buildings, and accommodate about 300 children. On Sunday, January 6, 1907, two children who, having sore-throat, had been transferred to the infirmary for observation and treatment were found to be suffering from diphtheria. A rigorous examination of all the school children revealed suspicious conditions in the throats of a considerable number, and by the end of a week (January 12) twenty cases of diphtheria had been notified. It was found from the first to be necessary that the throat of every child in the schools should be daily inspected. All children found to be or suspected of being infected were isolated.

Antitoxin treatment was at once commenced, and free use was made of bacteriological examination and swabbings as an aid in diagnosis. The usual means of disinfection, etc., were stringently adopted with a view of limiting the risk of infection. Arrangements were completed whereby the majority of the children affected were transferred from the infirmary to the local (Mogden) isolation hospital and to the isolation hospitals at Acton and Ealing. These methods were steadily persevered in, but nevertheless cases continued to arise. The persistence of the attack and the fact that it affected all classes of children throughout the schools proved only too clearly that widespread infection existed.

On either February 11 or 13 antitoxic serum was administered to every child, it being inconvenient to deal with all upon one day. The dosage was so arranged that the sixteen children isolated received each 1,000 units, and all other children, as well as several members of the adult staff, each 500 units irrespective of age. A second antitoxin injection was administered throughout the school on March 6 and 8, the doses being

similar to those previously given.

No further cases occurred until April 9, when there was one. On April 12 there was another. Two more appeared on May 10. With those cases the epidemic ended. Eight cases of diphtheria (all showing definite signs and all proved bacteriologically) arose, therefore, in different parts of the school in children who had received the antitoxin treatment, two of these occurring more than two months after the second injection. The cases proved generally mild, and I attribute their favorable course partly to the fact that few young infants were included, but chiefly to early diagnosis and prompt commencement of antitoxin treatment.

DAILY PRESS AND MAGAZINE ITEMS

STREAMS, SEWERS AND WELLS.

Editorial New York *Tribune*, January 11, 1908.

It is in a measure gratifying to observe that at last steps are being taken to stay the devastating epidemic of typhoid fever which has long been raging in and about the city of Trenton, N. J. We must, it is true, question the wisdom of the direction in which steps are being taken, at least as anything more than a temporary expedient, and even that only on conditions which probably do not exist. But it is gratifying and encouraging—though the statement may seem like a deplorable confession or a bitter indictment of the places in question—to know that something is being done and that the community has not settled down into an apathetic and fatalistic belief that the scourge is an inevitable and inscrutable visitation of Divine Providence against which it would be impious to struggle. That seemed to be the attitude of the managers of the State Asylum for the Insane at Trenton last year, but the city happily is more rational.

But we must question the wisdom of the course which has apparently been adopted—namely, to make no effort to purify the water supply, but to abandon it as hopeless and to seek new supplies which have not yet been contaminated. It is just possible that such a change of source can be more speedily effected than the purification of the present supply. If so it should be done, as a makeshift. But we cannot accept as sane the suggestion of some of the officials concerned, that any considerable supply of naturally potable water should be abandoned and given over to pollution. Not long ago one of the professional sages of Trenton put forth the amazing proposition that all streams of water were naturally intended to be used as sewers, and that they should, therefore, be abandoned as sources of potable water and our supplies should be drawn from artesian wells. That was a counsel of madness and despair.

We should say, on the contrary, that no running stream is naturally meant to be a sewer, and that any such use of one is a perversion. The sewage itself is too valuable to be wasted in that fashion and the water is certainly too valuable thus to be spoiled. In well populated countries the supplies of potable water are of great value and are to be jealously safeguarded, especially those from lakes, springs and streams. For they are in most cases preferable to the supply from artesian or other wells, for a variety of reasons. The quality of spring and stream water is usually far better, for all purposes, than that of well water, and the cost of utilizing it for urban supplies is much less.

The one conceivable advantage which artesian well water can have over surface water is its supposed greater freedom from contamination. But that freedom is by no means absolute and impregnable. In the case of artesian wells of moderate depth, at any rate, there is a real and considerable danger of contamination, and that danger, which may exist in the case of any well, however deep, is much intensified by the prevalence of the very policy which drives men to the use of wells, namely, the reckless pouring out of crude and poisonous sewage into streams and lakes and elsewhere. When streams of liquid poison are let loose on or in the soil there is no telling whither they may not flow or what mischief they may not do. The only safe policy is to destroy their virulence and make them innocuous before they are let loose. If that is done our springs and streams and lakes will be available for the supply which is so much needed and which they can best provide.

TOO SANITARY HERE FOR GREAT RAVAGES, SAYS HEALTH OFFICER.

New York Tribune, Jan. 12, 1908.

Dr. A. H. Doty, health officer of this port, in a special article, entitled "Plague," in the current issue of *The Medical Record*, declares that bubonic plague, typhus fever and other epidemics that have caused persons to die by the tens of thousands in plague ridden districts could not exist for such long periods or be attended with such extensive mortality to-day in this country. Dr. Doty contends that, while much of the knowledge of plague transmission is theoretical, enough facts are known of the disease and its agents to combat it by modern sanitary regulations. He says the people of this country are intelligent, and not only observe but aid in the enforcement of these regulations.

He says the unfavorable reports from India and other sections of the East of the presence of the plague have caused much uneasiness in this country. This was especially so when the disease appeared recently in San Francisco. While he has no doubt that the reports from the Orient are accurate, Dr. Doty maintains that the people of India are greatly handicapped in combating the disease through ignorance and a peculiar religious creed, which cause the native population deliberately and seriously to obstruct health officials in the performance of their duty.

Dr. Doty takes up the history of the plague from the time of the Christian era to the outbreak in Western Europe in 1896. Prior to the revival of the disease in India and China, and particularly in Hong Kong, in 1894, the writer says, there was practically no scientific knowledge of the cause of the disease or its transmission. It was then that Kitasato and Yersin, working independently of each other, discovered the specific organism of the plague.

"Subsequent investigation," says Dr. Doty, "has presented numerous theories as to the means by which this disease is transmitted, the most prominent one being that it is the rat through the medium of fleas."

The Health Officer then cites a case that came under his own observation in November, 1899, when he detained the crew of the steamer James W. Y. Taylor, which had come from Rio de Janeiro, where a plague epidemic existed. One man died on the passage and was buried at sea.

The captain said the entire crew were in good health, and they appeared to be from visual examination.

Dr. Doty took the crew to Swinburne Island, where one man whom he believed had the disease developed it in a mild form. The ship was disinfected with sulphur dioxide and all dead rats were put into metallic receptacles, but examination in the laboratory showed no evidence of plague among them.

Dealing with the history of outbreaks, Dr. Doty says in part:

"While every sane and practical means should be taken to protect against the presence of presumably infected rats, either on shipboard or on land, we are not justified in carrying out regulations which are unreasonable and which unnecessarily cripple commerce or the public; besides we must not forget that plague may be transmitted in other ways than by the rat.

"The history of outbreaks of plague and other infectious disease furnishes conclusive evidence that the results which follow their appearance depend principally on the means which are taken to prevent their extension. Even simple measures of protection are sometimes followed by the most satisfactory results. A notable and well authenticated instance of this occurred in 1656, during the outbreak of plague in Italy, particularly in Naples and Rome, both populous cities.

"In the latter place the measures which were carried out for the protection of the city were under the personal supervision of Cardinal Gastaldi, who was exceedingly energetic in his efforts to enforce cleanliness, prevent overcrowding, etc. The result of his work was very significant. While plague caused 300,000 deaths in Naples, it caused but 14,000 deaths in Rome. There can be no reasonable doubt that the measures taken by Cardinal Gastaldi were largely responsible for this result, as the mortality at Naples corresponded to the mortality which occurred during outbreaks of this disease at this period in other sections of Europe.

"The present outbreak of plague in San Francisco appeared in August of this year. Thus far there have been only 112 cases. The treatment of this outbreak has been under the supervision of the United States Public Health and Marine Hospital Service, and the results are very creditable to those in charge and show what modern sanitary methods can accomplish even in a community which has not yet recovered from a recent serious disorganization.

"In referring to this subject, it is not my intention to belittle in any way the danger that outbreaks of infectious disease may involve, but to emphasize the fact that the results which follow their appearance depend principally on the means which are taken to prevent their extension, and that so far as plague is concerned, the very unfavorable reports which come to us from India and other sections of the East must not be accepted as an indication of what would follow an outbreak of this disease in the United States, or in any other part of the world where modern sanitary regulations are enforced."

A mesenteric cyst may give the same signs as a small ovarian cyst. Mesenteric cysts, although movable, are usually attached to the ascending colon. When the colon is dilated a direct relation can be made out between the gut and the tumor.

HYDROPHOBIA AND HYSTERIA.

Fear Working Upon Imagination a Factor in Producing the Symptoms of Disease.

To the Editor of *The Tribune*:

Sir: I read with great pleasure your very sensible editorial on the case of Christian Henry in Wednesday's *Tribune*. The conclusions which you reach were also, if I remember correctly, arrived at by Dr. Dulles, of Philadelphia, after an exhaustive study of the phenomena of hydrophobia.

One wonders at times if many of our so-called cases of hydrophobia are not analogous to the Italian tarantelle,—the dancing frenzy supposed by ignorant Italians to result from the bite of the tarantula. It has, I am told, happened more than once that an Italian peasant bitten by a tarantula has wildly danced himself to death. But among nations who do not believe in and have never heard of the tarantelle disease, it is safe to predict, will never occur.

The variety of diseases of hysterical origin is so great that one finds no difficulty in believing that rather more than half our reported cases of hydrophobia are imaginary. In many parts of this country it is still believed by many persons that if a healthy dog bites a person in 1908 and goes mad in 1918 the person bitten a decade before will have hydrophobia!

In the great battle against disease which is waged on the right wing by improved sanitation, clean ideals of living, the encouragement of optimism, fresh air and hardy habits, and on the left wing by bacteriology, vivisection, drugs and serums, the right wing I believe will save the day and cover the retreat of most of the forces of the left.

S. N. CLEGHORN.

New York, January 10, 1908.

THE KNIFE IN CANCER.

Editorial *New York World*, Jan. 12, 1908.

Medical science, with new cancer cures announced in every quarter, confesses itself baffled in the search for one that will stand the test of results. Shall it meantime continue to use the knife? Dr. Robert Bell, formerly senior physician of the Glasgow Women's Hospital, says that "during fifteen years' experience as an operating surgeon he has been unable to count a single success in dealing with cancer."

Dr. Bell's statement is not taken to mean that patients have died under the knife or immediately afterward. The inference is that they have not survived the operation long enough to warrant the claim that they have benefited from the removal of the diseased tissue.

Dr. Saleeby in his new book on cancer expresses the opinion that the knife may in time be discarded. That time may not have arrived. But Dr. Bell's experience, taken in connection with the failure of surgery to prolong the lives of cancerous patients in cases that come to the notice of every observer, should impose a hesitation on physicians to use it except as a heroic measure in the last extremity.

As an alternative to the knife, with its record of fatalities, a public which is decimated by the disease and ready to try any remedy, from violet rays to trypsin, may accept Dr. Bell's suggestion that the disease is amenable to treatment through diet, and the reclamation of the vitiated cells by means of a healthier blood stream.

Pennsylvania Doctor Offers Strong Statistical Proof of His Criticism of Medical College Graduates.

Newark *Evening News*, Jan. 9th.

PHILADELPHIA, Pa., Jan. 8.—In support of the assertions he made last week, that the present medical curriculum in the average medical college does not properly prepare the student for the practice of his profession, Dr. Henry Beates, Jr., president of the Medical Council of Pennsylvania, and also head of the State Board of Medical Examiners, has gone a step further and offered statistical proof. His criticism of the average medical graduate was replied to the day after it was published by several of the leading medical school professors in Philadelphia. These all held that he had overstated the facts.

Dr. Beates, in turn, has given out a statement of the examinations for physicians' diplomas held in Philadelphia last month, for persons desiring to practise in this State. Out of eighty-eight applicants for the coveted diplomas, he said, fifty-one failed to pass examinations in all the subjects, while twenty-nine failed to qualify for the diplomas, the passing mark being only seventy-five out of a possible hundred.

Of the fifty-one, it was shown, with only a few exceptions, the unsuccessful applicants failed in the elementary subjects in which an examination was held, physiology and pathology.

Medico-Legal.

Suit Against Dr. W. W. Golden, President of the West Virginia State Medical Association, for Alleged Mal-practice.

HISTORY.—About three years ago an old man from a rural section of Barbour County was referred to Dr. Golden by a physician of Belington, and placed under his care in the Davis Memorial Hospital, of Elkins, W. Va., for treatment of a severe injury to his face, inflicted by the kick of a horse the day before. There was a serious compound fracture of the superior maxillary and nasal bones. The injury to nose was such that it could be laid over to one side of the face. Delirium, or some kindred condition, rendered the treatment and care of the man extremely troublesome. Unless restrained, he would tear the dressings from his face, and otherwise do himself bodily injury. The man was extremely filthy, none more so within the doctor's experience. The filth included a liberal supply of pediculi. As a result of this, or, perhaps, some constitutional condition, the patient was covered with numerous ulcers all over his body. Those on his wrists received particular attention on account of the mechanical restraint which had to be applied to them. The restraining apparatus used was what is known as the Lynch Humane Restraint. The result of the treatment of the wounds of the face was perfect; and, at the expiration of three weeks his mental and general condition were greatly improved. Upon leaving he walked unaided to the railroad station, some distance away. As a matter of common courtesy the patient was referred back to the physician who sent him to the hospital for such subsequent attention as he might possibly require. While the patient did not belong to that class of people capable of fully appreciating good professional services, Dr. Golden had no idea of ever having any trouble of a legal nature from him.

THE SUIT.—After the lapse of about nine months, during which time Dr. Golden heard nothing of the patient, suit was entered in the Circuit Court of Randolph County against the Davis Memorial Hospital in the sum of ten thousand dollars, claimed as damages for injuries inflicted on the plaintiff's wrists and feet by the improper use of restraint, alleging that cords were used for this purpose, and claiming that permanent disability to one hand and both feet and temporary disability to the other hand had resulted. Three months later suit was brought against Dr. Golden personally in the same amount under a similar declaration. The suit against the hospital was dismissed on a demurrer, the law being very clear that no such action can be maintained against an institution of a charitable character. The suit against the doctor pended in court for two years, and finally came to trial the 26th of last month.

THE TRIAL.—The witnesses for the plaintiff consisted of himself, his wife, two sons-in-law, the father of one son-in-law, a close neighbor and one other person who denied any relationship or interest. In addition to these the plaintiff had two physicians to testify. * * * Very strenuous efforts were made by the attorneys for the plaintiff to make out a case against the defendant, the trial lasting five court days. It was quite evident that the doctor's high professional standing, on the one hand, and his charge of an institution with which the name of the wealthy senator is associated, on the other hand, had much to do with this strenuousness.

The plaintiff's feet and right hand were so strikingly normal in their functions and free from all anatomical abnormalities that that part of the declaration touching their injuries was scarcely referred to at the trial, and the energies of the plaintiff, his counsel and witnesses were concentrated upon the allegation of serious injury and disability to left hand and wrist. The plaintiff, when first put on the witness stand, held his left hand, covered by a mitten, in an attitude calculated to give an impression of serious deformity. But before he was aware of it, he had his hand out of the mitten and vigorously and quite naturally scratched his head with it, and performed other movements with it. Later on, when he displayed this member to the jury, it was found to be practically normal, and the only basis for the suit lay in a small scar on his forearm about five inches up the wrist. The referring back of the patient to his own physician was made much of by his attorneys, presenting it in the light of a conspiracy in order to conceal the nature of the plaintiff's injuries from the rest of the world. It soon became quite evident that there was no case made. Attorney Ware, in the closing speech for the plaintiff, made frantic efforts to make up for lack of facts by appealing to every possible prejudice that a crafty spirit could conjure up. Not the least interesting of his many utterances were those directed against physicians in general and medical associations in particular. The basis for this lay in the fact that a goodly number of physicians appeared in behalf of the defendant. The substance of some of his aspersions are worth recording, for instance: "The doctors are like crows, when one is winged all the others flock to his cry." The most brilliant one and one which will undoubtedly secure him a place in the Hall of Fame was the declaration that "Medical associations are a trust, like the Standard Oil Trust, which has recently been

financed many million dollars." He was quite emphatic in stating that the object of medical societies is the same as that of the Bar Association, and that both of them have for their sole object the purpose to raise the scale of fees. (Here Attorney Scott interrupted, reminding him that the Bar Association also aims at raising the scale of lawyers.)

The jury, after being out less than half an hour, returned a verdict entirely in favor of the defendant.

REMARKS.—Throughout the trial the sympathy of the entire community was with the doctor, including every physician, and the moral support given him by the profession, both from here and from adjacent counties, no doubt materially contributed to his marked equipoise during the progress of the trial and enabled him to energetically assist his attorneys. The verdict as rendered, while expected, gave him and his numerous friends great gratification, as no doubt it will many readers of *The Journal*. This is marred, however, by the fact that the plaintiff is reported as having no property; and, therefore, the doctor will be out hard-earned dollars to cover the expenses of the trial. It is regrettable that our law does not require the plaintiff in such cases to file a bond to secure the cost of trial.

This makes five cases of such law suits against physicians in different parts of the State that have come to my knowledge within the last two months. Is it not high time for our State Association to do something for the protection of its members in cases of this kind?—Dr. Wilson in the *West Virginia Medical Journal*.

Construction of Accident Policy Covering Blood Poisoning Sustained by Physicians or Surgeons Through Wounds.

—The United States Circuit Court of Appeals, Eighth Circuit, had, in *Fidelity and Casualty Company of New York vs. Thompson*, an action brought by the latter party on a policy of insurance "against disability . . . resulting directly, and independently of all other causes, from bodily injuries sustained through external, violent and accidental means," wherein it was declared: "This policy, subject otherwise to all its terms and conditions, covers blood poisoning sustained by physicians or surgeons resulting from septic matter introduced into the system through wounds suffered in professional operations."

There was evidence tending to show that the plaintiff, as stated in the policy, was an operating dentist; that during the life of the policy a patient, on whom he was in the act of professionally operating for affected teeth, suddenly coughed, and thereby particles of septic matter were conveyed from the patient's mouth to the conjunctiva, or mucous membrane, of the plaintiff's eye; that the septic matter infected this membrane and was thus introduced into his system, and that he was in consequence wholly disabled from practicing his profession for a period of ten weeks, and partially disabled for a succeeding period of twenty-six weeks. There was also evidence that he felt the impact of the particles on the surface of the eye, but no evidence that it produced any pain at the time, or abraded, penetrated, broke or bruised the conjunctiva, or that the septic matter was introduced into his system otherwise than through the process of infection, in like manner as if the particles had entered the nose, mouth or throat and had lodged on and infected the mucous membrane thereof.

The defendant company requested the trial court to include the following in its charge to the jury: "You are instructed that, by the terms of the plaintiff's policy of insurance, it is made to cover blood poisoning sustained by a physician or surgeon resulting from septic matter introduced into the system through wounds suffered in professional operations; but you are also instructed that there is no evidence of the plaintiff having received any wound, and he must recover, if at all, on other provisions of the policy." But the court denied the request, and included in the charge the following definition of the word "wound," taken from the Century Dictionary: "In surgery, a solution of the continuity of any of the tissues of the body, involving also the skin and mucous membrane of the part, caused by some external agent, and not the result of disease. In medical jurisprudence, any lesion of the body resulting from external violence, whether accompanied or not by rupture of the skin or mucous membrane—thus differing from the meaning of the word when used in surgery."

Without doubt, the Court of Appeals says, it was essential to a right of recovery under the provision relating to blood poisoning that the septic matter should have been introduced into the system through a wound. What, then, is a wound within the meaning of this provision? No purpose would be served by stating the various meanings ascribed to the word by lexicographers, writers on medical jurisprudence, and judges, for they all recognize that one of its well-recognized meanings—that principally employed in surgery—includes an abrasion, breach or rupture of the skin or mucous membrane, whereby animal venom or virus, or some impure, poisonous or irritating matter, may gain entrance to the underlying tissues and contaminate the blood; and this, as the court thinks, is the sense in which it is employed in this provision. It is there used only in respect to physicians and surgeons when performing professional operations, and then only in respect of a bodily injury through which septic matter may be introduced into the system and result in blood poisoning. Plainly, therefore, it refers to such a wound as removes the protection given to the tissues and blood by the skin and mucous membrane and so permits of the introduction of septic matter capable of poisoning the blood; in other words, it refers to an abrasion, breach or rupture of the natural covering through which the septic matter may gain entrance.

As so employed, it does not embrace such a wound as is described in the latter portion of the definition given in the charge, and does not include the blowing against the eye of that which does not mechanically abrade, break or rupture the conjunctiva, but merely communicates to it an infectious disease by contact with its outer surface. So far as was disclosed by the evidence, the immediate mechanical effect of the particles blown into the plaintiff's eyes was not different from what it would have been if they had consisted of so much pure rain water; they did not wound it, but infected it from the exterior, operating in like manner as do some other species of infecting matter when they come in contact with unbroken skin or mucous membrane of other parts of the body. Indeed, it appeared that the pathogenic germs in what was blown into the eye were chiefly pneumococci, which, if carried into the lungs, produce pneumonia; but it would not be said in such a case that the infection of the lungs was through a wound.

The conclusion is that the instruction requested should have been given, and also that the latter part of the definition given to the word "wound" was rendered inappropriate by the other terms of the provision relating to blood poisoning.—*Jour. A. M. A.* (Jan. 4, 1908).

VIVISECTION—ITS ABUSES.

AN UNNECESSARY BILL.

Editorial in *The Medical Record*, Jan. 18, 1908.

A bill purporting to be in the interest of humaneness has recently been drawn up for introduction at the present session of the New York Legislature. The promoters of the bill have been sending canvassers about among the members of the medical profession in this city endeavoring to obtain signatures to a petition favoring the passage of the measure. As the bill, on hasty reading, seemed to be moderate enough and devoid of oppressive features, a number of signatures were obtained, but we understand that many of these were withdrawn by the signers as soon as they appreciated the real significance of the movement. Even a medical contemporary was led to commend the measure editorially, but withdrew its support the following week. This is the only basis for the statement that the medical profession of the State is in favor of the proposed legislation, and the assertion that has been made that the New York physicians themselves drew up the statute is entirely erroneous. The New York physicians are opposed to it and the more they study it the stronger is their opposition.

It may not be known to all our readers that the existing laws regarding the prevention of cruelty to animals, which seem to have been very wisely drawn, already constitute a safeguard against possible abuses. The law allows the performance of "any properly conducted scientific experiments or investigations, which experiments shall be performed only under the authority of the faculty of some regularly incorporated medical college or university of the State of New York." This law has proved sufficient for its purpose, and under it New York has advanced to the front rank among American centers of medical and scientific progress. Neither in the interest of humaneness nor on the part of the medical profession is any change in the existing law needed or desired, and we can conscientiously counsel our professional brethren to stand as a unit against lending their assistance to any such movement.

The measure now proposed is the more dangerous from its plausibility. It requires the licensing of all buildings in which animal experiments are to be performed, provides for semi-annual reports regarding the statistics and details of experiments, limits demonstrations, and places upon experiments a number of restrictions frequently demanded by the out-and-out antivivisectionists. Under the notion that the disposition of experimenters is such that they require restrictive control—a notion, the insulting character of which must be evident to every member of the medical profession—the bill offers barriers to medical progress. It should be strenuously opposed.

Especially should the argument be allowed no weight that the bill in question would forestall more radical and more dangerous legislation. It would inevitably pave the way, should it become a law, for other oppressive and more restrictive

measures. Such an argument reveals only more clearly the insidious nature of the present attack. Here, as elsewhere, it is the first step that counts. The passage of the first anti-vivisection law in this State would mean the beginning of improper limitations which would have no end. The united effort of the medical profession is needed to prevent this first step.

THE DOCTOR IN POLITICS.

Editorial Journal Missouri State Medical Asso.

The two representative British medical journals, the *Lancet* and the *British Medical*, have recently given considerable space to lengthy editorials bearing on the vital subject of the good that results, not only to the medical profession but to politics, *per se*, by the election to office of medical men. Among the famous men cited we find Combes and Clemenceau in France, Dr. Jameson at the Cape and Professor Baccelli in Italy; and in a lesser degree Mr. R. R. Dalglish, who "has received the honor of mayoralty for the ninth time since 1885, while the Montgomery records announce that Mr. N. W. Fairles-Humphreys has eight times been mayor. But the blue riband for medical mayors must be accorded to the historic borough of Saffron Walden in Essex, where during the latter half of the eighteenth century the civic chair was occupied by medical mayors on six occasions, during the nineteenth century seventeen times, while the century in which we are now living has already seen three medical men in the highest municipal post."

The foregoing statements from authoritative sources indicate that in certain parts of the world the fact that a man is of the medical profession is no deterrent to his entry into the political arena. Again, the fact that a number of the doctors have been repeatedly honored illustrates an appreciation of their powers to administer public matters and a possession on their part of principles of so high a character that one may say with considerable assurance in no case has there been evidence of a doctor's reputation becoming tarnished through politics. And here we might dwell on the enormous possibilities for good which the medical man can exercise when he accepts an office of inferior or superior worth. While every doctor who is elected to a political position can not wield the power of a Combes, who is the present premier of France, or of a Clemenceau, he nevertheless may be the means of influencing, by reason of his scientific knowledge, the many problems which will confront him. And these problems, involving sanitation, pure food laws, legislation against quackery, child labor, the smoke nuisance, are surely not light material but such stern stuff that a superior amount of knowledge is necessary to combat them effectively. Now, although the cabinet at Washington has never had a medical member and may never have one, considering how things are arranged with us; and other high offices throughout the land may continue to be closed doors against the profession, the fact remains that no small importance should be attached to a membership of the legislature or to the mayoralty of even a small town, when such positions are filled by medical men of the stamp set forth in the British journals. For by keeping the interests peculiar to the medical man's vocation independent of the interests attaching to a political position, the latter is so strengthened by the splendid quality of disinterestedness that its

powers to correct sanitary mistakes (to take but one instance), or abolish the many abuses which obstruct the way to success, are illimitable. And the sooner the doctor who wishes to realize the high ideal which can result from the association of medicine with politics learns the importance of the right interplay of one with the other, the sooner will be taught to the world at large the necessity of electing that sort of man in preference to one whose politics overshadow his little knowledge to such an extent that he is a mere politician, with all the moral shortcomings of that class.

Medical Legislators of Two Republics.—

C. A. L. Reed, in the *Jour. A. M. A.* (May 25, 1907), draws a striking contrast between the proportions of medical men in the legislative bodies of France and the United States. There are ninety-two physicians in the two houses of the present French Congress, the Ninth, elected last year, while in our last Congress, the Fifty-ninth, that has just adjourned, there were only four, one in the Senate and three in the House. The contrast is the more striking when we consider the respective populations of the two countries. France, 38,000,000 in 1906, and the United States, estimating on the basis of the census of 1900, approximately 85,000,000, and still more so when we take into account the number of physicians in the two countries—122,000 in the United States and in France hardly one-fourth of that number. Dr. Reed goes over the list of French deputies and senators and shows how many professionally prominent men it includes and how high they stand in public estimation, judging from the honors they have received. Special notice is given to Drs. Clemenceau and Combes. Our present medical representation in our own Congress, while eminently respectable in quality, makes a very poor showing in quantity as compared with that in France. It would seem, as Dr. Reed says, that the medical profession in the United States is not doing its full duty in these higher activities of American citizenship. A partial list of members in State legislatures is also appended. —*N. Y. Med. Record.*

THE CHURCH IN POLITICS?

Extracts from an article in *The Interior* by J. W. Laughlin, D. D., January 18, 1908.

The church has long occupied a position favorable for the development of public sentiment. The hesitancy with which she has entered upon this divine right is due to a mistaken notion of her sphere of action. Years ago men tried to classify duties. To the church they gave marriages, funerals, teaching and preaching, but with voting, with running for office, with the management of newspapers and municipalities she must have nothing to do. To this arrangement, now a relic of antiquity, there still remains a few adherents.

With the coming of the new life which now pulsates in every line of twentieth century activity, there has come also a new thought with reference to the relation of the church to the world. In the mind of the modern thinker the church's mission is not only to prepare men for the other world; it has to do with this. Hence it addresses itself to every activity that pertains to the life of mankind. It has to do with politics and religion, with commerce and culture, with municipalities

and schools. Its work is to better the condition of society.

This is in perfect keeping with the idea of the Master. He said the kingdoms of this world shall become the kingdom of our Lord and his Christ. What kingdoms? The kingdoms of politics, of industry, of music and art, of agriculture and commerce. He said, "Go ye into all the world and preach the gospel." Into what world? The world of buying and selling, of building and rail-roading, of law and medicine. That is to say, in the mind of the Master, the church or the spirit which it bears in the remedial agency for the world's wrongs. It is the light of the world, the salt of the earth, the hope of mankind.

Unfortunately for society, the average churchman frequently becomes so much interested in his own affairs that he neglects those duties which must be observed by the generality if we would maintain the government of our fathers. Now and then some lethargic citizen hears his civic conscience speak and is aroused to a discharge of his duty, but with one or two repulses from antagonists less scrupulous and better versed in politics, he retires, and the field is left to the enemy. Hence we have a convenient, conventional, not to say cowardly morality which has opened the way for our present unhappy political condition. It has allowed shamelessly widespread stealing, which amounts almost to a national vice. It has provided such a story of political corruption for the magazines and daily papers as to lead a stranger to believe that we are a nation of thieves.

There never was a time when the church was more in need of a new message than at the present. Not a message of theology, old or new; not a message of criticism, high or low; but a message of common honesty, common humanity and civic righteousness such as will rouse the membership to a sense of public duty and moral progress. Will the pulpit of the present day rise to the occasion? Is the ministry of the twentieth century sufficiently alive to public morals to give the needed instruction with reference to the principles and aims of government?

* * * * *

The church in politics? Aye. Where else should she be? What folly to take an offering to send the gospel to some mission field, and at the same time and in the same ship send enough rum to neutralize and destroy all the good the missionary accomplishes! Why pray "thy kingdom come," and then on election day send such men to the city hall or the legislature as will raise on earth anything but the kingdom of heaven?

It is not enough to-day, if it ever was, for the church to maintain a prayer meeting where the more devout may pray for the welfare of Zion. The church must stand for better social and moral conditions. It is not sufficient in the face of our industrial strife and struggle for a man to say "I am a Methodist" or "I am a Presbyterian," he must be more—he must be a factor in his community for righteousness and morality, and thus place the stamp of public service on the religion which gives satisfaction in private devotions.

The opportunity is imperative. The success of recent reform movements points with unerring finger to achievements possible when the church is thoroughly aroused. The public conscience has been mightily quickened by the courageous example of the present incumbent of the White House. His brave stand for the right has stiffened the

backbone of many a half-hearted saint, and although the fight for political reform is only begun, a sensitive national conscience is everywhere felt. This is the tide in the realm of morals which if taken at its flood will lead to a new demonstration of the church's right to exist. Shall we seize this opportune moment in the life of the nation and give such a moral tone to civic affairs as will secure the future of the republic; or shall we hesitate and by political indifference wreck the ship of state perhaps before the voyage of the second century is half finished?

Reports from County Societies.

CUMBERLAND COUNTY.

S. M. Wilson, M. D., Reporter.

The quarterly meeting of the Cumberland County Medical Society was held at the Weatherby House, Millville, at 2 P. M. January 14th inst. The meeting was presided over by the President, Dr. E. S. Corson. There were fifteen members present, which, considering the demands upon the profession by the extensive grip epidemic, betokened much of interest in the meeting.

The essay of Dr. C. W. Wilson on Opsonins, while being a subject of recent note to the general practitioner, was one of interest, and was generally discussed.

Dr. E. J. Chapman read a report on Progress in Therapeutics, which was one of special interest, and showed much of thought and research in preparation.

The next meeting is the annual one, and is to be held on the second Tuesday, April 14th, at 11 A. M.. The place of meeting will be City Hotel, Bridgeton.

There are no marriages, deaths or removals among the profession to make record of, and the general health of the members throughout the county has been good during the past year.

Bridgeton, N. J., Jan. 18, 1908.

GLOUCESTER COUNTY.

H. A. Wilson, M. D., Reporter.

The Annual Meeting of the Gloucester County Medical Society was held at Paul's Hotel, Woodbury, on January 16th, at 1.30 P. M. The meeting was well attended and entertained as guests Dr. Jos. Price, of Philadelphia; Drs. H. H. Davis, Emma Richardson, W. H. Iszard, of Camden; T. B. Rogers, D. V. S., and C. W. Gray, Ph. D., of Woodbury.

LaGrippe and measles were reported epidemic in the county and scarlet fever in one section.

The following officers were elected: President, E. T. Oliphant, Bridgeport; Vice-President, Chas. D. Pedrick, Glassboro; Secretary and Treasurer, Geo. E. Reading, Woodbury; Reporter, H. A. Wilson, Woodbury; Censors, H. A. Stout, L. M. Halsey, James Hunter.

Delegate to the State Society, H. A. Stout; delegates to Camden County, E. T. Oliphant, H. A. Wilson, J. G. Edwards, H. A. Stout, C. S. Heritage; delegates to Salem County, E. Z. Hillegass, James Hunter, H. B. Diverty; delegates to Burlington County, L. M. Halsey, H. A. Stout, James Hunter; delegates to Cumberland County, C. B. Phillips, C. F. Fisher, Geo. E. Reading.

Dr. Joseph Price gave an address on Surgical Diagnosis, with a short history of early operators and operations. He urged most careful examina-

tion and early diagnosis in all abdominal affections. It was a practical heart-to-heart talk and was followed with the closest attention and interest.

Dr. T. B. Rogers, representing the New Jersey Society of Veterinary Medicine, asked the cooperation of the Society in securing more efficient cattle and milk inspection, and in promoting legislation to establish a Bureau of Animal Industry. On motion, the Society endorsed the action of the Veterinary Society and pledged its support and aid in securing the passage of the necessary legislation.

Dr. Halsey, of the Committee on Legislation, of the A. M. A., asked the support of the Society in securing the passage of a bill in Congress, granting a pension to the widows of Drs. Carroll and Lazear, who lost their lives in the study of the cause and prevention of yellow fever in Cuba.

On motion, the Secretary was instructed to write to the Senator and Congressman from this district, declaring in favor and urging the passage of the bill.

Dr. Halsey also called attention to the renewed activity of the osteopaths and their endeavor to secure an entire board of examiners. Dr. Halsey reproached the members of the Society for their lack of interest in the work of the Committee on Legislation, and assured us that our friends, the enemy, are in a state of pernicious activity.

The Society adjourned to March 19, at same hour and place.

HUDSON COUNTY.

August A. Strasser, M. D., Reporter.

The regular meeting of the Hudson County Medical Society was held on December 3, 1907, Dr. F. D. Gray presiding. The attendance was fair in spite of the abominable weather. Under interesting cases Dr. Chard related a case of nasal discharge, which later developed pharyngeal diphtheria. He called attention to the peculiar discharge, which was at times turbid, egg yellow in color, very acrid and producing erosions about the nares. This discharge was constantly characteristic in his practice in nasal diphtheria, and he described another case where infection was traceable to a case with that form of discharge. Dr. Wallace Pyle stated that in his experience cases of true nasal diphtheria were very infrequent. Dr. George E. McLaughlin detailed the history of a patient in whom was found a tumor in the region of the stomach, and on operation this was defined as a tumor of the pancreas, and the wound was closed up. Antisyphilitic treatment was instituted, which caused the disappearance of the mass and complete recovery. He also related another case where the culture from the infected pharynx showed Vincent's bacillus, the case being one of Vincent's angina. Dr. Oestman expressed himself as never having seen a case of nasal diphtheria without some pharyngeal involvement. Dr. Faison detailed Mayo's new method of perineal prostatectomy; the point in the selection for this method depending on the findings at rectal examination. If he can not reach the top of the prostate with his forefinger he does a suprapubic operation, but in eighty per cent. of cases the perineal route is feasible. A special knife is used and the operation is comparatively easy, taking from five to ten minutes. Dr. Faison spoke of two cases of his own; one of them the patient was able to be

about after three days. Dr. Gray reported a case of pustular furunculosis, treated by antibacterial vaccine according to Wright's theory. Five injections caused a cessation for five weeks; re-appearance was promptly checked by fresh inoculations, with apparent cure. The paper of the evening was on "Epidemic Cerebro-spinal Meningitis" by Dr. P. J. Hamill. It was discussed by Drs. McLaughlin, Hardenberg, Rosenkrans, Faison, Gray and Hasking.

Inasmuch as no member of the Committee on Postgraduate Work was present to present any report, the following resolution by Dr. McLaughlin was adopted: "Resolved, That the Postgraduate Committee be instructed to prepare a written report and submit it at the next meeting." A motion that at the next meeting the matter of medical defense by the State Society be thoroughly discussed was also carried. The Censors reported favorably on the following, who were elected to membership: Drs. Street, Russell, Stigner, Bidwell, Meyer, Nay, Wm. L. Pyle, all of Jersey City.

A communication was received from the Retail Druggists' Association asking that a committee be appointed to confer with a similar committee, in order to bring the two professions closer, especially as it has been done in Union county. The resolution to have the President appoint such a committee on ways and means in the matter was carried and it was ordered that a special meeting of the County Society be held in January to which the retail druggists be invited, and when the report of the joint committee should be received and its recommendations discussed and the matter acted upon. The President appointed Dr. Hetherington, chairman; Drs. Brinkerhoff, Chard, Sexsmith and Richard Kuehne, Sr., members. After other routine business the meeting adjourned.

The Reporter is indebted to the Secretary, Dr. Hasking, for this report, inasmuch as he was unable to attend the meeting; its delay in transmission is due to Dr. Hasking's recent illness.

MERCER COUNTY.

Edgar L. West, M. D., Reporter.

The Mercer County Medical Society held its regular meeting January 14th at 8 P. M. in its new rooms in the Chamber of Commerce building. In the absence of the President and Vice-President, the meeting was called to order by Dr. William A. Clark. Dr. James H. Buchanan, of Plainfield, read a very instructive paper on "Bronchial Asthma," in which he emphasized the importance of an accurate differential diagnosis. Considerable discussion followed the paper, and among those participating were: Drs. Adams, North, Armstrong and Mackenzie. While the Society regrets the absence of our genial and esteemed President, Dr. Weeks, it can congratulate the managers of the State Village for Epileptics, at Skillman, in having obtained, in him, a medical director worthy to carry on the work so ably performed by his father.

That section of the Society which has taken up the post-graduate course, as outlined in the *A. M. A. Journal*, has found the work most beneficial. The meetings, which are held weekly in the rooms of the Society in the Chamber of Commerce building, continue to grow steadily in attendance and interest.

MIDDLESEX COUNTY.**Benjamin Gutmann, M. D., Secretary.**

The regular quarterly meeting of the Middlesex County Medical Society was held at South Amboy, January 15, 1908. There was a fair attendance of the members. An excellent dinner, at the Rappawam Hotel, preceded the business session. Three new candidates were proposed for membership; they were, Drs. Laurence P. Runyon, Howard C. Voohress, and Percy Schureman, all of New Brunswick. Other routine business was transacted.

The Society, after considerable discussion, adopted resolutions approving the practice of vivisection by one of its members, in so far as it was conducted without undue cruelty to the animals experimented upon; and under the provisions of a law enacted several years ago, gave its permit for the practice of vivisection, under proper conditions, to the said physician, or any other member of the Society, on notification to the Secretary of his desire to perform vivisection for scientific purposes.

The topic of the day, "Grip," was freely discussed by several of the members.

The Society extended its congratulations to two of its members, Drs. Ramsay and Ellis, on their election as member of the Legislature and Mayor of Metuchen, respectively, expressing its belief that the election of physicians to political office will tend toward intelligence and cleanliness in the administration of political affairs.

BERGEN COUNTY.**J. W. Proctor, Secretary.**

The regular quarterly meeting of the Bergen County Medical Society was held on January 14th. Dr. C. W. Harreys, of Ridgewood, read a paper on Pernicious Anæmia. Dr. W. B. Johnson, of Paterson, exhibited the bronchoscope and gastroscope. The names of the following physicians were proposed for membership: Chas. A. Knox, Ridgefield Park; Henry A. Bonyng, Ridgewood; W. F. Keating, Wyckoff; G. W. Finke, Hackensack, and James MacKellar, Tenafly.

**SOCIETY FOR THE RELIEF OF WIDOWS
AND ORPHANS OF MEDICAL MEN
OF NEW JERSEY.**

At the December meeting of the Board of Trustees, the following new members were elected: Drs. H. Lindenbaum, C. H. Ball, P. W. Frace, R. Kuehne, Jr., F. K. MacMurrough, G. W. Muttart, C. A. Limeburner, I. L. Allen, E. C. Armstrong, T. J. Jacquemin, W. Meyer, R. B. Gilman, J. H. McCroskery, P. Stigner, W. W. Brooke, W. F. Faison, F. F. Bowyer, P. F. Ghee, B. S. Pollak, W. L. Pyle, L. Mendelsohn, A. V. Piskorski, H. J. H. Bogardus, G. M. Culver, W. N. Vreeland.

Typhoid in Pittsburg.—With the pumping of the first filtered water from the new filtration plant in this city, December 21, Dr. James F. Edwards, superintendent of the bureau of water, made a recapitulation of what he calls "Pittsburg's thirty-year epidemic of typhoid." Since 1878 50,200 people have been stricken with typhoid fever in Pittsburg and 7,615 have died. Last year there were 5,729 cases and 608 deaths. His report

further shows that one person out of every thirty-six had typhoid fever during the year, and that one out of every ten who were stricken died.

Appendicitis Operation on Ocean Liner.

Another instance of abdominal surgery performed under trying conditions was reported when the Cunarder *Pannonia* arrived recently from Mediterranean ports. A coal trimmer on December 23, 1907, manifested symptoms of acute appendicitis, and the ship's surgeon, Dr. J. Fraser Orr, decided that prompt operation was imperative. As there was a heavy sea on, the engines were stopped and the ship allowed to fall into the trough of the waves to lessen the pitching while the surgeon, with the aid of a medical assistant, removed an appendix that was found to be gangrenous. On reaching port the patient seemed in good condition and likely to have an uncomplicated convalescence.

Smoke Nuisance Award.—The Court of Appeals (New York State) has just affirmed a verdict for \$4,000 damages recovered by a plaintiff against a large corporation for damages arising out of the defendant's violation of the smoke nuisance law.

A Medical Fund for the Poor.—The late Mrs. Fannie Letitia Keating bequeathed \$10,000 to Dr. H. T. Woodward, of San Diego, Calif., and certain minor bequests to others. The remainder of her estate is to be invested and the proceeds applied to "the employment of one or more duly qualified medical and surgical practitioners, who shall devote all of his or their time and energies to the relief of the sick poor, either permanent residents or visitors to the city of San Diego, irrespective of sex, politics or creed."

Book Reviews.

GNORRHŒA—ITS DIAGNOSIS AND TREATMENT, by Frederick Baumann, Ph. D., M. D., Chicago. D. Appleton and Co., New York, 1908. 200 pages; 52 illustrations; \$1.50.

This little (small in size) book is especially valuable in omitting many well-known details and giving clearly and concisely the essential points in the diagnosis and treatment of gonorrhœa and its surgical sequellæ. The illustrations are excellent. The type is large and clear. The surgical operations so often necessary are well described.

A TEXT BOOK OF MINOR SURGERY, by Edward Milton Foote, A. M., M. D. Instructor in Surgery, Coll. P. & S., N. Y. & C. D. Appleton & Co., New York, 1908. 750 pages, \$5.00.

This is the most complete and up-to-date work on the subject that we have seen. It covers fully and concisely the whole field of minor surgery. The chapters on technique, bandaging and dressings are especially useful. The illustrations are numerous and, being mostly reproduced from photographs, are truthful. Dr. Foote's extended field of observation enables him to write largely from practical experience. While there may be differences of opinion as to some of the methods of treatment, we can not but cordially commend this book as a most valuable aid to the general practitioner in his daily work.

THE JOURNAL

OF THE

Medical Society of New Jersey

FEBRUARY, 1908.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

ATTENTION PLEASE!

We expected to give special prominence in our March issue to the Hospitals and other public institutions in our State which care for the sick and disabled, but the tardy responses from our Reporters to our request for information may compel us to defer it until a later issue of THE JOURNAL. We shall be pleased to receive from any of our readers communications in reference to these institutions: their needs, defects—evils connected with them affecting the profession or the general efficiency of the institution, with suggestions for their correction, etc. Also clinical reports of unusual or extraordinary cases treated or operated upon therein.

THE PHYSICIAN IN POLITICS.

We gladly give space in this issue of the JOURNAL to a communication from Dr. Warman on "The Physician in Politics." We do not expect that our members will always agree with our views as expressed in the editorial columns, and shall always welcome communications expressing opposite views, when they are not too lengthy, unless their insertion is deemed inadvisable by the publication committee. We believe this subject is worthy the consideration it is receiving in many of our medical journals—nearly every writer favoring the physician's activity in politics and his acceptance of the people's call to any office for which he is qualified.

We agree with Dr. Warman as to the sacred calling of the medical profession and the importance of the observance of fidelity by its members to their patients, though we think his argument against the physician serving in public position—that some will refuse to pay him because they voted for him—savors of the commercialistic rather than the sacred calling idea of the physician's occupation. We doubt if *they* would pay at all, and if they would the amount lost would be a small sacrifice to members of a profession who are accustomed to sacrifices and charity unequalled in any other profession. The question of fidelity raised by the doctor—as to the physician being needed by his patients when attending to the duties of public office—we will not now discuss, but simply call attention to the fact that the argument applies with equal force to the doctor's service on health boards (which the doctor approves), on boards of State institutions, on school boards, State militia positions, directors of banking and other institutions, to vacation abroad or at home, etc., or attendance at meetings of national, State or county medical or religious organizations. Most physicians who serve in political positions have partners, or arrange with other doctors to attend patients during their absence.

We agree with Dr. Warman concerning the young men just entering the profession and heartily endorse Dr. Oliver Wendell Holmes' advice to such on their graduation from the medical college. These physicians should concentrate their thought and attention largely on their chosen profession, in the endeavor to build up and maintain a good practice. It is necessary and all important. But when the doctor, after many years of practice, has become well established and shows special interest in and qualification for political position, we can see no objection to his acceptance of it, but, on the contrary, many reasons why he should respond to the call to public office. We believe he exalts his sacred calling by accepting position where he can on a larger,

grander scale serve humanity, yes, and serve his patients as well. He is needed in the halls of legislation as an intelligent man, qualified as none other to legislate on all matters affecting the public health, not only in the enactment of laws directly affecting medical practice and sanitation, but also affecting education as related to the development of sound minds and bodies. There is a great need of a decided change in our educational methods in this direction.

We call attention to two articles on page 353 on "The Doctor in Politics," referring to the distinguished services of France's two premiers—Combes and Clemenceau—and Prof. Virchow, of Germany, who for many years was a member of the Reichstag, as well as many prominent physicians in our own country who have held political office and served most acceptably.

We fully agree with Dr. Warman in objecting to the physician "going into the dirty pool of politics." We believe in clean politics, and for that reason we advocate the proposition that the members of the "sacred calling" of medicine accept the call to public office, or at least take a deeper interest in politics, cutting off disease growth and using vigorously preventive measures to keep them clean and wholesome. The times call, as never before, for the dominance of clean men and clean methods in politics. The true science of politics—the science of government—is sacred, and the art that applies it ought to be intelligently and sacredly conducted. There is a growing spirit of restlessness throughout our country concerning the overbearing and greed of political "bosses," and the party that opposes the growing demand for clean men and methods and for civic righteousness is destined ere long to defeat.

We believe the members of our profession are taking a deeper interest in politics, and that they, as a class, are in favor of clean politics rather than ultra partisan politics—desiring the highest welfare of the State more than the success of party. Because of our beliefs, we congratulate the

physicians of both parties who have recently been elected to political office. We also congratulate Governor Fort on entering upon his duties as governor of our State. His speeches during the recent campaign rang true to the lofty ideals of statesmanship as regards wise legislation, the sacred obligation of official position and clean politics. If he shall be able to carry out the promises then made he will win the approval of good citizens of all parties. We were pleased to note in Dr. Halsey's communication—November JOURNAL, page 251—the governor's attitude toward the medical profession. He will, we believe, have in the legislature and outside from the members of the profession generally—regardless of their political faith, their approval and support in all his efforts to carry out his expressed lofty purposes to serve our State, especially in all measures for the preservation and advancement of the health interests of our State.

OUR COUNTRY AND OUR SOCIETY.

Every true American citizen, who loves his country and desires to maintain its exalted position among the nations, has reason to be optimistic and thankful, from the fact that our intelligent and law-abiding citizens, who believe that "righteousness exalteth a nation," are awaking to a realizing sense of their responsibility. They are beginning to see that "faith without works is dead" and that it is high time for action; that our politics must be purified in order that civic righteousness shall be established and maintained; that to do so our politics must be conducted by intelligent, honest and clean men and that such men should be elected to office. We have expressed our belief that physicians should assume their share of the work.

Our State Medical Society was organized ten years before the Declaration of Independence was adopted. Its members, with physicians in other States, had much to do in securing our national independence and in laying the foundations of our government. A large number of them held

prominent political office in the early years of our national life and helped to develop that life so as to insure the healthy and vigorous growth it has manifested. Surely none is more competent to-day to diagnose and treat the diseases that have developed during these later years and apply the principles of preventive medicine to insure its future healthfulness and vigor than the well-educated physician.

We call attention to extracts from an able article in *The Interior*, entitled "The Church in Politics?" which will be found on page 353 of this JOURNAL. The views expressed are in accord with the objects sought in the organization of the "Federation of Churches" in many of the cities of our State—one of its main objects being to promote civic righteousness. These societies are conducted by clergymen, physicians, lawyers, educators and business men in the interest of good government. It is hoped that their work will tend toward the elimination of ignorant, dishonest and impure men and the saloon and greedy corporation elements from the control of our politics.

VIVISECTION.

We call the attention of our members to an editorial from the *New York Medical Record*, which will be found on page 352 of this JOURNAL, in reference to the bill before the New York legislature to regulate and control vivisection. It is evident that many physicians were deceived at first as to the meaning of its provisions. Some of our New Jersey physicians, who have expressed the desire that such a bill should be introduced and passed by our legislature, will doubtless, on more careful scrutiny of its provisions, change their views. It certainly seems to bear the ear-marks of the anti-vivisectionists. Surely no medical man, intelligent enough to realize the great part vivisection has played—and is destined to play in the future—in the advancement of medical science, for the benefit of humanity, will ever lend his voice or vote to discontinue or unnecessarily restrict it. The questions of the places for, and methods of, ex-

perimentation may be, doubtless are, open to discussion, and wise regulations and restrictions should be adopted. The person engaging in the work should be qualified for it, allowed to vivisect for scientific purposes only and required to carry on the work without cruelty to the animals operated on and without undue annoyance to the residents of the community.

NICHOLAS SENN, M. D.

America has lost one of her most distinguished surgeons, ablest teachers and authors and most loyal and patriotic citizens, in the death of Dr. Nicholas Senn, of Chicago, which occurred January 2, 1908. He was sixty-three years of age. He had been a sufferer from chronic interstitial myocarditis for two years; acute symptoms developed during his tour around South America last year (accounts of which journey given by him in the *A. M. A. Journal* have been exceedingly interesting), but unfortunately his imprudence in ascending a great mountain to an altitude of 16,000 feet, resulted in acute dilatation of the heart, and about two weeks before his death an acute nephritis developed, hastening his death.

An obituary in the January 11th issue of the *A. M. A. Journal* gives an extended account of his life and services, and in closing pays a beautiful and fitting tribute to his memory as follows:

"Nicholas Senn was truly great; master of his profession; a patriot, always ready to sacrifice his personal interests and comfort for the service of his adopted country, intensely loyal in his friendships; generous to a fault; simple-minded; too honest to harbor suspicions; a man of singularly clean speech, never profane or vulgar. His great glory was in his extraordinary capacity for work, which he held as duty, and that work entirely for the betterment of his fellow-men. Of him it may with truth be said that the world is better for his having lived."

Not only was he highly esteemed for his personal worth and eminent professional ability and services throughout our country, but his fame extended to Europe, Africa, South America and the Far East.

MEDICAL EDUCATION.

What is our object in medical education? That object is to develop, or attempt to develop, the ideal practitioner. It is not merely to develop a learned man, but to develop one who shall so bear himself in all his relations that he will be a credit to himself, his *alma mater*, his profession and his country; who shall be, in the first place, of the greatest possible service to those of suffering humanity to whom he ministers, and not only that, but shall be an influence for good in improving the conditons of life in the community in which he practices; who shall so minister that he aids and strengthens his fellow-workers and raises the standard of our profession as a profession; who shall add credit and lustre to the school which has produced him, and, lastly, who in all his relations shall so bear himself that at the end of the day's work—as at the end of life's work—he shall feel within himself that he has done his duty loyally and has earned his rest.

It is difficult to picture forth the ideal practitioner, nor shall I attempt it. Each of us, I doubt not, has his own idea of that ideal. In the words of Pythagoras, "There are two things which must ennoble Man, and make him to resemble the Gods: *to know the Truth and to do Good.*" The ideal practitioner of all men, it seems to me, most constantly attempts to exemplify this saying and to live the noble life. High character, good manner and marked capacity play important parts in our ideal of what he should be.—*J. G. Adami, M. D.*

The words of Pythagoras point to the Great Physician—He *was* "THE TRUTH" who "went about DOING GOOD"—Our truest, highest ideal.

TRAINING IN MEDICAL ORGANIZATION.

The students of the University of Pennsylvania Medical School have formed an organization the purpose of which is to acquaint the undergraduates with the workings of the American Medical Association, after which it is very closely modeled. The various student societies take the place of the State organizations and elect members in a House of Delegates which transacts all the business of the association. An annual meeting is held at which papers are read by chosen members, thus encouraging original research and a scientific spirit. The organization is named the Undergraduate Medical Association of the University of

Pennsylvania, and already has over two hundred and fifty members.

We regard this as an excellent movement, which is calculated to benefit the young men, the A. M. A. as an organization and the profession generally. We need trained men in organizing and conducting the business affairs and in the prosecution of the scientific work of the profession; and this training should begin in a practical way in the medical colleges. It would be well if, in this training, practical pharmacy and the art of writing prescriptions formed a part. It would be a great help to them, benefit their patients and help destroy the nostrum evil.

We were very sorry to hear of the severe accident that befell our esteemed associate and Secretary of the State Medical Society, Dr. William J. Chandler, a few weeks ago—a heavy fall resulting in the fracture of two ribs, one of them penetrating the pleural cavity. We are pleased, however, to report him as recovering and able to partially resume practice.

We also deeply regret to hear of the illness of our highly respected Fellow, Dr. Elias J. Marsh, Sr., of Paterson, and express our hope for his speedy restoration to health.

We offer no apology for the prominence we give in this issue of our JOURNAL to the subject of the relation of our profession to politics. While partisan politics has no place in a medical journal, all professional men and especially physicians should be deeply concerned about the physical, moral and intellectual conditions of our citizens and the medical journal representing the profession, should advocate the highest possible perfection and efficiency of all our State institutions and machinery that have to do with the physical, moral and intellectual conditions of the people. This kind of political activity we should not neglect—we cannot if we are good citizens.

We regret being compelled to defer the insertion of an able paper by Dr. R. P. Francis, of Montclair, on "The Medical Inspection of Schools," until the March issue of THE JOURNAL.

The Newark Medical League held its annual meeting on December 23, 1907, in the parlors of the Continental Hotel, Newark, and elected the following officers: Dr. David A. Kraker, President; Dr. Herbert W. Long, Vice-President; Dr. E. Steiner, Treasurer; Dr. Julius Levy, Reporter; Dr. Louis Weiss, Secretary.

Correction.—In the January issue of THE JOURNAL, page 305, a prescription given by Dr. F. W. Pinneo, in discussing the papers on the eruptive diseases read at the annual meeting of the State Society, was incorrectly printed; it should have been as follows:

℞ Potassii chloratis	6
Acidi boraci	
Sodii boratis	aa 4
Glycerini	30
Aq. menth. piper	45
Tr. cudbear	q. s. ad color
Aquæ ferv.	q. s. ad 120

S. Throat wash (to be swallowed). For tonsilitis, scarlatina and other pharyngeal infections.

Correspondence.

"THE PHYSICIAN IN POLITICS."

DEAR MR. EDITOR:

I beg leave to differ with you and the *Journal of the American Medical Association* on the status of the physician in politics. It is all right and honorable that he should realize his obligation as a good citizen in the affairs of the community in which he lives and in the State and nation; but when it comes to his holding office—especially a political one, either municipal, county, State or national—I would call a halt for the following reasons: The first is, politics is a profession and our graduates in medicine are not educated for that purpose, but for a far higher and nobler one. I could give you several instances from my own observation of young physicians especially who, during the early years of their professional career, plunged into politics and soon wrecked themselves and their practice of medicine. Politics, especially during a doctor's early professional career, even when honorably pursued, is ruinous to his prospects. To take it up later in life, when his medical reputation is already extensive, militates against him but does not entirely ruin him. If honorable politics injures thusly, how much worse are ward demagogism and wire-pulling at primary meetings? Then again politics don't pay the doctor. He could make ten dollars and ten friends by medicine while you are making one of either by politics besides escaping many anxious hours and bitter disappointments.

If a doctor is unfortunate enough to be elected to office as mayor of a city or town, those who cast their votes for him will hold him under obligation so long as either of them lives, and a certain number of them will never pay him a cent for professional services. Three of the physicians of Trenton have been mayors of the city, and the collector they employed at the time told me that when he presented their bills for professional services, many of them refused to pay up on the ground that they voted for him and did not intend to pay, and, moreover, he was under obligations to them as long as they lived.

One day I was about to enter the office of a prominent lawyer, and a former Mayor of Trenton, who was ejecting a man from his room with

a few "cuss words," as he was excited. He informed me "the man demanded a quarter of me, and when I inquired if I owed him anything he replied, 'No; but I voted and worked at the polls for you, and you are under obligation to me.'" This lawyer, who is now a prominent judge, remarked at the time that he had many such calls, and that these fellows seemed to think you were under obligations to them for the remainder of your mortal life, and that he had come to the conclusion that "a professional man has no business to meddle with politics, especially a *lawyer* or *doctor*, as it belittles and debases both professions and should be tabooed by each if they desired eminence or success in their calling." Again I have known medical men, who have been looking for political preferment, and were trying to secure a nomination for office, to receipt many of their bills for the purpose of getting their help and influence for the position sought.

Of course there are some positions that belong to our profession, such as that of health officer in cities and county and city physicians; but here unfortunately politics come in and the worthy man and the one best fitted for the place is rarely selected. However, I do remember one case in which a worthy and efficient physician was appointed here as Health Inspector, but when he refused to pay a political assessment of \$50 he was turned down for a reappointment by the bosses and board of health, although he had the written endorsement of the entire regular medical profession of the city, and an incompetent man was put in his place. Here again is where politics should be divorced from positions of this character. In your editorial you enumerated nine physicians who had been chosen Mayors at the last election in the cities and towns of New Jersey. One of them from this city. But here the list of doctors holding political office is not confined to that of Mayor. Mercer County can boast of a young doctor who holds the office of Sheriff of the county, and another physician that of County Clerk; both worthy members of the profession who have bartered it for a mess of pottage in the political pot, and for which neither of them was educated or trained. They are positions for which a business man is much better qualified. What a waste of time and talents! and what a loss to our noble profession!

When I graduated in medicine Dr. Oliver Wendell Holmes delivered the address to the graduating class, and among the other good and wise things he said to the boys were the following words, which will form a fitting conclusion to what I have already said about "The Physician in Politics":

"Young gentlemen, avoid the dirty pool of politics, as politics and medicine are incompatible. Suppose that you were in the midst of a heated political campaign and some one seriously sick should summon you to the bedside, in what condition would you be to prescribe for the patient?" He then gave us instances that had occurred on the floor of Congress, one being when a member of that body was taken suddenly ill and one of these "medico-political" men, in the emergency, prescribed for the patient a poisonous dose which terminated fatally.

If the physician does not practise his profession for which he was educated, and goes into politics, he should at once abandon it—as a misfit. No intelligent conscientious physician will attempt to attend patients and politics at one and

the same time. The treatment and cure of those that are sick is a great responsibility and requires all the time and talents of those who are committed to his care. Moreover, the physician cannot do justice to himself or his patients if he goes into politics at the same time. Consequently, a good politician makes a very poor doctor as the result. There are plenty of laymen of ability better qualified for the office of Congressman, the State Legislature or for Mayors of our cities and towns, Sheriffs or County Clerks. All medical men should become members of our State and County Societies, and each one of these societies should have committees appointed on legislation whose business should be to look after all matters appertaining to the health and lives of our fellow-citizens. They could make their influence felt in this way more efficiently than by becoming members of a legislative body as you suggest. Many a good doctor has been lost to the community by going into the dirty pool of politics. As Dr. Holmes has so truthfully said, the two positions are incompatible; therefore, "let the cobbler stick to his last," and the physician to his profession as the wise and proper thing to do.

DAVID WARMAN.

Trenton, N. J., December 18, 1907.

Therapeutic Notes.

Acne Rosacea.—

℞ Lac sulphur 3i
Camphor gr. x
Tragacanth gr. x
Rose water 3iv

M. et Sig.: Apply night and morning.

—J. E. LOCKRIDGE, *Med. Times and Hosp. Gaz.*

Angina Pectoris.—During the attack Barber recommends that amyl nitrite be inhaled at once; a capsule containing three or five minims should be broken in a handkerchief and the vapor inhaled; if this fails to relieve in a minute or two chloroform may be tried, which is best administered on a sponge in a smelling bottle by the patient himself; and for pain which is persistent, morphine, gr. 1-4 hypodermically, is required, which in a feeble patient may be counteracted by an injection of strychnine. At the same time, if at hand, the following stimulant should be taken:

℞ Spirit ætheris m xxx
Spirit. ammonii aromatici m xxx

Aquæ camphoræ q. s. ad 3j
Or failing that, f3ss of brandy.

Anorexia.—

℞ Tr. nucis vomic. 3iv
Ferri et. quin. citrat. 3iii
Tr. gent. comp. 3i
Vini xerici q. s. ad. 3vi

M. S.: A teaspoonful in water before meals.

Burns.—For burns of the third degree Prager uses the following dusting powder:

℞ Iodoform 3i
Acidi borici 3vii

M. S.: Apply locally over the area involved.

For extensive burns Leweson recommends the application of a 6 per cent. solution of aluminum acetate. After twenty-four hours' use of this a powder should replace it:

℞ Zinci oxidi 3ii
Bismuthi subnit 3iv
Lycopodii 3i

M. S.: To be applied locally, freely.

For the pain of severe burns Dale advises first a hypodermic injection of morphin and after the initial shock:

℞ Chloral. hydrat gr. x
Sodii bromid gr. xx-xxx

M. S.: Give in water at a dose, and every three hours until relief is obtained.—*N. Y. Med. Jour.*

Calculus-Renal.—Horowitz says: (*The Post Graduate*, July, 1907). The object is first to relieve the colic, and to get rid of the stones or sand; and then to prevent return. Heat or cautery to the back, or hot baths often relax the patient and overcome suppression of urine. Plenty of water should be drunk. Carbolic acid in the dose of i to ii grains t. i. d. is excellent for relieving the pain. Opiates should be avoided where possible, as they stop peristalsis in the ureter, and tend to prevent the passing down of the stones. Horowitz has found the following of great value:

℞ Ext. Hyoscyamus, fl. 3ii
Ext. Damiana, fl. 3iv
Kali Bicarb 3iii
Mucil. Acacia, q. s.
Aqua, q. s. ad 3iv

Sig. 3i t. i. d. in aqua.

Diuretics are also of great value, as Basham's mixture (liq. ferri et ammon. acetatis) in 3ii doses q. 2 h. If the stone can be palpated, or it is shown clearly with X-rays that it could not be passed, then we must resort to surgical interference and nephrotomy must be done.

Chamomile Enema.—For obstinate postoperative intestinal atony the following is often successful:

℞ Infus. chamomil 3viii
Ol. terebinth rect. 3ii
Carbo, lig. 3ii
Aq. menth. pip. 3ii

M. ft. Enema. S.: Inject warm.

Chapped Skin.—For chapped face or hands, or for sunburn, the following is highly recommended:

℞ Acid acet. dil.
Glycerin aa. 3i
Bismuth subnit q. s. ad. ft. massa.

S.: Apply locally.

Colic, Acute.—

℞ Chloroform 3iss
Tr. opii deodorat. 3j
Camphor gr. xv
Ol. cajeput 3i
Aqua q. s. ad. 3ij

M. Sig.—Teaspoonful every hour or two.

Dermatitis Venenata.—

℞ Sodii hyposulphit 3i
Menthol gr. v
Spir. vini rect. 3i
Spir. æth. nit. 3i
Aquæ dis ad Oi

M. S.: Apply locally.—*Medical Times and Hospital Gazette.*

Diarrhea.—

℞ Tinct. kino mxxx
Tinct. opii mv
Tinct. zingib mxv
Mist. creta q. s. ad. 3i

Sig.: To be taken every four hours.—BEAZELY.

Dysmenorrhoea.—

℞ Morph. hydrochlor 0.02
Extr. hyoscyam. 0.1
Butyr. caca 2.0

M. et ft. suppositoria. Kantrowicz.

Current Medical Literature.

Physiological Action of Tea as a Beverage.—

Lauder Brunton believes that tea, when properly prepared and taken in moderation, is both useful and agreeable. The avoidance of danger from impure water is not the only advantage to be gained by drinking vegetable infusions. Tea is a stimulant, and the use of stimulants is almost universal. The effect of tea, coffee, or cocoa seems to be threefold—on the circulation, on the spinal cord, and on the brain. When these substances reach the circulation, the flow of blood through the brain is increased, the brain cells are supplied with extra nutriment, and thought is quickened. It is probable that the brain cells themselves are affected by tea or coffee, so that communication between them becomes more rapid, more complete, and more permanent, than under ordinary circumstances. But it must not be forgotten that these substances tend to keep up mental action when it is not needed. Thus sleep, which restores the tired brain, is prevented. These beverages lessen the sense of fatigue and give a sense of wellbeing and of power, and actually add to the power of endurance. Tea is liable to abuse, and may then bring about most disastrous results. Tea may interfere with nutrition by lessening the feeling of hunger, by rendering food less digestible, and by interfering with the digestive power of the stomach. The different kinds of tea vary in the amount of tannin which they contain. The leaves should never be boiled or stewed. Boiling water should be poured on the leaves, and after standing for a few minutes should again be poured off. Taken with meat, it toughens the fiber. Hard water and water containing iron do not make good tea. A pinch of bicarbonate of soda, when hard water is used, improves the infusion. Tea, when taken in excess, may produce the most serious nervous symptoms and facilitate, if it does not actually produce, mental degeneration.—*The Practitioner*.

Recurring Pleural Empyema.—J. H. Pryor.

in the *Boston Med. and Surg. Jour.*, gives full details of one case, his patient being a young man, nineteen and a half years old. In 1904 he had pneumonia followed by empyema and the usual rib resection was done. He remained in the best of health for nearly three years, when he began to have a harassing cough, fever, and progressive weakness. Examination showed nothing to account for his symptoms, but in the course of two months it was pretty evident that there was pus in the chest somewhere on the side previously affected, and a second operation revealed a pus sac. The patient fully recovered after a prolonged convalescence. Pryor states that recurring empyema is an extremely rare affection, this being the third case on record, on the basis of an extremely careful search of the literature of empyema, both medical and surgical. Secondary attacks are apt to assume the sacculated or localized form, on account of the pathological changes following a preceding general involvement of a large part of the pleura. The symptoms are confusing, and may be ascribed to tuberculosis. Some time may be required to form an opinion by exclusion. It is conjectured that microbe life may remain latent in a pocket formed in the process of healing after the primary attack and again become active under unknown favorable conditions. In the foregoing

case, there was no record of the bacteriological content of the pus removed in the primary operation, performed before the patient came under the author's care. Streptococci were found the second time. Whether the time of closure of the external opening has any relation to recurrence is an unsettled point.—*N. Y. Med. Record*.

Phlegmonous Gastritis.—H. E. Robertson, in the *Jour. A. M. A* (Dec. 28), reports two cases of this disorder, in both of which streptococci were found in the lesions, and briefly reviews the literature. The etiology, clinical symptoms, diagnosis and treatment, pathology and bacteriology are also discussed and the article is summarized substantially as follows: 1. Phlegmonous gastritis is a rare form of gastric inflammation characterized by diffuse or focal infiltration of the stomach walls by puss and serum. 2. It is due to the entrance into the submucosa of a virulent organism, usually the streptococcus, through some lesion, though in some cases this has not been discovered. 3. It is more common in males of alcoholic habits and at or past middle life. 4. The clinical symptoms are vomiting, thirst, pain and tenderness in the epigastrium, fever, rapid pulse, signs of peritonitis, collapse, and sudden death. 5. Its duration ranges from twenty-four hours to fourteen days, averaging from four to six days. Diagnosis is usually made at autopsy. 6. The prognosis is very grave and treatment, beyond relieving pain, of no avail. 7. The autopsy frequently shows, in addition to the stomach lesions, a purulent peritonitis and associated lesions. 8. Bacteriologic examination usually yields the streptococcus in pure culture. The circumscribed forms of the disease with focal abscesses are, in Robertson's opinion, probably due to a mixed infection or by some other organism, such as the staphylococcus.

Use of a Ventral Bandage During Labor.—

Vallee ascribes great assistance in the progress of labor to the use of a firm, wide bandage placed about the abdomen early in labor, combined with the use of the horizontal position in bed from the first true labor pains. The author discovered the value of this method accidentally, but has made use of it with excellent results since then. It is found to expedite labor markedly. The uterus is so placed that the head is applied with the bag of waters in the center of the pelvis. Pains become regular and powerful, coming with increased rapidity, and labor is complete in a few hours. The bandage is so placed as to exercise a constant pressure on the uterus, and it forms a point of support for the contractions. No bad effects are found in the infant from the pressure exercised by the bandage. As the last stage begins and the pressure of the bandage is too high up, it should be assisted by pressure from the hands of an assistant, which follow down the body of the child. The pain of the contractions is much lessened by these maneuvers, and the patient is much less fatigued than usual. The bag of waters is kept intact until the last moment, and it is due to its presence and normal dilating action that labor is hastened. The placenta is much flattened and is delivered rapidly, without much hemorrhage. The method has been used with success in all presentations of the fetus.—*Journal des Sciences Médicales de Lille*.

Syphilis in Children.—Weiss, in *New York State Journal of Medicine*, states that the number of cases of acquired syphilis in children is insignificant in comparison to the number of cases in which the syphilitic taint has been inherited from the parents. The modes of transmission are threefold: 1. Direct infection of the healthy mother by the diseased father having florid secondary symptoms causing in the mother the same kinds of lesions. The child so conceived usually dies *in utero* and is aborted. 2. Direct transmission of the syphilitic taint through the infected sperm of the father, the mother being healthy. In such cases the mother may remain well and even the child may escape. The mother may become immune through absorption of toxins elaborated by the fetus (Colles' Law). When the infection is on the part of the mother with a diseased ovule the taint is more disastrous to the child than paternal heredity. This condition is rare. 3. Infection of the fetus when the parents were healthy at the time of impregnation and infection of the mother takes place during pregnancy. By treatment of the parents or by natural attenuation, viable healthy children may be born and these are immune against the acquisition of syphilis (Profeta's Law). The author draws a composite picture of the syphilitic child or adolescent and discusses epilepsy, progressive paralysis and locomotor ataxia in relation to inherited syphilis.

Subclavian Aneurism.—Pearse, in *Journal of the Missouri State Medical Association*, reports a case of aneurism of the subclavian external to the vertebral artery, but extending inward in fusiform shape beyond the scalenus anticus. The thyroid axis had fused into the sac and its separate branches had to be tied and cut. The aneurismal sac was cut away; the operation, which had many difficulties, occupied three hours and ten minutes, and was entirely successful, the patient, a locomotive engineer, being now at work again and able to handle his engine as well as ever. Pearse believes the collateral circulation to have been established as follows: 1. Above: The blood of the ligated vertebral artery is soon replaced by anastomosis with its fellow of the left and by anastomosis with the thyroid axis on the left. 2. The anastomoses of the ligated thyroid axis are maintained and blood is passed to the branches of the axillary. Below: The intercostal arteries anastomose with the superior thoracic, long thoracic and subscapular. Other small channels about the shoulder in a healthy well developed subject are also available.

Cancer Following Roentgen Exposures.—Schümann, in *Archiv für Klinische Chirurgie*, Berlin, reports another case of cancer developing on the hand of a Roentgen operator; the growth was removed by Trendelenburg last February. He also reviews the other similar cases on record, including that of Dr. Fuchs of Chicago, whose death occurred recently. Four of these professional cases occurred at Hamburg, which has been a center for Roentgen work in Germany. Schümann states that he has found no record of cancer developing after an acute x-ray burn. Chronic x-ray dermatitis seems to be the soil on which the cancer develops. He calls attention to the fact that chronic Roentgen dermatitis has many points in common with other skin affections, which likewise predispose to cancer. The Roentgen cancer seems to affect young persons—the fatal cases were all in men just entering the

thirties. The carcinoma has generally several centers and rapid growth was observed in most. In conclusion he reviews the cases on record in which cancer developed after Roentgen treatment of lupus. Mendes da Costa had this experience in seven out of seventy-one cases of lupus treated by Roentgen exposures. Wyss and others have reported similar cases, but the number is so small in comparison with the number of persons who have had lupus cured under Roentgen treatment that Schümann does not think the possibility of cancer should deter from its application. Riehl observed a spindle-celled sarcoma and a carcinoma develop an inch apart on the site of a patch of lupus which had healed seven years before under seventy Roentgen exposures. In one of the cases of professional Roentgen cancer the patient had a carcinoma on the arm and a spindle-celled sarcoma on the right cheek. Treatment should be the same as for other forms of cancer, and the wound heals as under other conditions.—*Journal A. M. A.*

Obituaries.

BAILEY.—The obituary notice of Dr. C. H. Bailey will be found on page 325 of our January issue. The following is the action of the Mountainside Hospital Staff on his death:

At a special meeting of the Visiting Staff of the Mountainside Hospital, held December 19, 1907, the following resolution was adopted and ordered spread on the minutes:

The members of the Visiting Staff of the Mountainside Hospital have heard with genuine sorrow of the death of their friend and colleague, Dr. Charles H. Bailey.

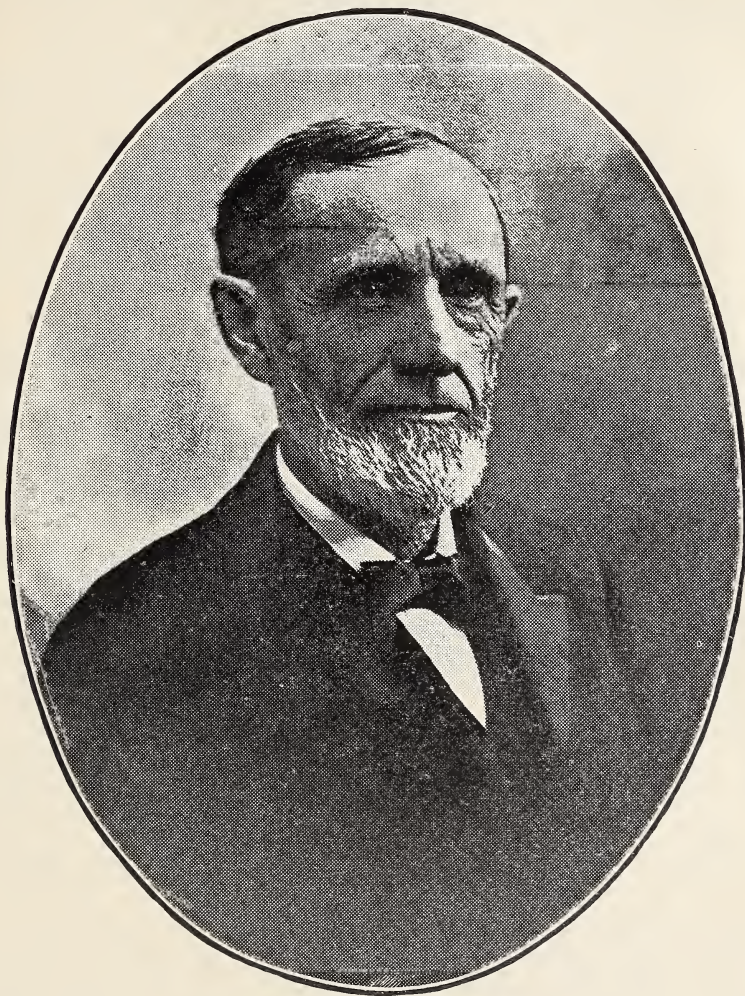
Dr. Bailey was one of the original members of the Staff and, until two years ago, when failing health compelled him to relinquish active practice, had been always zealous in his hospital work and faithful in performing the duties which devolved upon him. In the early years of the hospital his advice was particularly valuable when questions of enlarging the scope of the institution were discussed; and during all the time of his active connection with the Staff he conscientiously did his work as attending surgeon and was always ready and willing to give to others the benefit of his counsel. His opinions on medical matters or on matters pertaining to the policy of the hospital were often sought, and his clear, sound judgment made these opinions of great value. His colleagues on the Staff feel that they have sustained a great loss; for Dr. Bailey was a good physician, a wise counselor and a firm and true friend. He was a man whom it was good to have known, and his place will not easily be filled.

To his sorrowing family, the members of the Visiting Staff extend their deepest sympathy.

HENRY B. WHITEHORN, President.
RICHARD P. FRANCIS, Secretary.

HARDENBERG.—At Jersey City, January 1, 1908, Dr. Daniel T. Hardenberg, in his sixty-eighth year. He was graduated from the Albany Medical College and served through the Civil War as assistant surgeon in the Fifty-ninth New York Volunteers. He had been a resident of Jersey City for forty years, but was compelled to give up active practice about five years ago owing to failing health.

DR. JOHN C. JOHNSON, THE OLDEST FELLOW OF THE MEDICAL SOCIETY OF NEW JERSEY—PRESIDENT IN 1867.



JOHN C. JOHNSON, M. D.

Dr. John C. Johnson died at his home in Blairs-town, at 7 o'clock, on Monday morning, December 23, 1907, at the age of seventy-nine years, two months and two days.

Early in the fall he began to suffer from attacks of asthma, but he continued his practice and struggled bravely to overcome the disease. He felt to the last that his work here was not finished and that he could not and must not give up. The last time he was out was on November 29th.

Dr. Johnson came from an old and highly respected family—French Huguenots, who emigrated from France and settled first in Hunterdon County. Henry Johnson, great-grandfather of Dr. Johnson, was an officer in the Revolutionary War. He died at the age of ninety years. He was an elder in the Newton Presbyterian Church.

Dr. Johnson's parents were William H. and Anna (Couse) Johnson. The father was a merchant in Newton many years. He was postmaster of Newton under President Harrison, and again under President Taylor. His was a faithful and

consistent Christian life. He died in 1863, at the age of sixty-eight years. Of the five children, the only survivor is Mary, wife of Mr. W. W. Woodward of Newton.

Dr. Johnson was born at Lewisburg, Sussex County, on October 21, 1828; but spent his boyhood and early manhood in Newton. He attended the public schools of that town, and, after completing the general and classical course in the Newton Academy, took up the study of medicine in the office of the late Dr. John R. Stewart. His medical education was obtained at the College of Physicians and Surgeons in New York, being graduated from there March 8, 1850, with the degree of Doctor of Medicine.

In looking for a suitable location to practice his profession Dr. Johnson decided upon Blairs-town and settled there on June 3, 1850. He married Miss Anna L. Howell, daughter of John R. and Sarah (Armstrong) Howell, on January 15, 1862. They had one child, Miss Sara A. Johnson.

Dr. Johnson enjoyed a long, successful and uninterrupted practice as a physician, his field cov-

ering a radius of from six to ten miles from Blairstown in all directions. His skill was early recognized and he acquired an extensive practice. He was frequently called into consultation with his brother practitioners here and in the neighboring towns. He stood high in the profession and by constant reading and study kept in touch with the advances in the medical world. He was in fact a beloved family physician, like "Weelum Maclure, a doctor of the old school."

For over fifty-seven years Dr. Johnson ministered untiringly to the sick and the suffering at any distance, in any kind of weather, day or night, and showed the same consideration in his professional service to those he knew would pay him nothing, as he did to the well-to-do. Multitudes of poor families have abundant reason to bless his memory.

Since 1852 Dr. Johnson had been a member of the Warren County Medical Society, in which he served as President, Reporter and Secretary. He was a member of the Medical Society of New Jersey, and its President in 1867. At the time of his death he was the oldest ex-President, Fellow and Trustee of the Society and out-lived the eighteen presidents who in succession followed him. He was one of the most faithful and most highly esteemed members of the Society. His contributions to medical literature have been extensive and as one of the historical committee of the medical society of his county he had gathered, compiled and written much that will be of incalculable value to the medical profession and the community and the State at large for future generations. He had practiced medicine longer than any other physician in the county.

Dr. Johnson united with the Presbyterian Church soon after going to Blairstown and was closely identified with its progress for over half a century. He was elected elder March 13, 1864, and was chosen clerk of the session August 24, 1886. He also served as trustee several terms. In all the work of the church he was most active, and both services on the Sabbath and the mid-week prayer meeting saw him present, unless called away by urgent professional duties. He was a man of prayer, with a deep and abiding faith in the promises of the Word of God.

Dr. Johnson had served since 1888 as a Director of Blair Academy. In 1852, after the resignation of Rev. James G. Moore, as principal, the school was kept open and instruction given for several months by Dr. Johnson and Rev. John A. Reiley. Through all the history of this institution Dr. Johnson was one of its best friends and a valued member of the board of directors. He was interested not only in higher education but took much pride in our public school system, and especially in the progress of Blairstown's public school.

Another good work to which Dr. Johnson was devoted was the American Bible Society, and he took an active part in the Warren County society, and was its President several years.

Dr. Johnson took keen delight in historical research, in genealogy, and in church history; and at the time of his death had the manuscript almost ready for the publication of a complete history of the First Presbyterian Church of Blairstown. He was widely read on all questions of public interest, kept himself thoroughly informed on the topics of the day, and his retentive memory was a perfect storehouse of information. He was a profound thinker and a clear, concise and elegant writer. He was an ideal Christian citi-

zen and a leader in the town's progress and improvements who always gave liberally to everything that looked to the betterment of the community in any way. His liberality was a conspicuous trait of his character. He was a poor collector of his own accounts.

In personal appearance Dr. Johnson was not unlike Abraham Lincoln, although not so tall. He had that same serious countenance, denoting honesty, integrity, a kind and generous heart, and an earnest, solid, nobility of character and purpose. His loss to the church can not be appreciated as yet; neither can we realize how much his death means to those whom he served as a physician. As a citizen and a friend he will be keenly missed in the every-day activities of life. He had no enemies. Everybody, old and young, loved him.

The funeral services were held on Thursday, December 26th, at 2 o'clock, in the Presbyterian Church. Rev. Luther Davis, pastor of the church, conducted the services.

[We are indebted to Dr. H. O. Carhart and *The Blairstown Press* for information concerning Dr. Johnson and for the plate, which faithfully presents his personal appearance.—EDITOR.]

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics— December, 1907.

The number of deaths reported to the Bureau of Vital Statistics for the month ending December 15, 1907, was 2,745. By ages there were 455 deaths among infants under one year, 199 deaths of children over one year and under five years, and 862 deaths of persons sixty years and over. Pneumonia, which usually shows an increase at this season of the year, caused 216 deaths, an increase of forty-seven over the previous month. Typhoid fever is charged with 39 deaths, a decrease of seven from the previous month. In order to diminish the death-rate from this disease careful supervision of water and milk supplies should be carried on without interruption.

The following shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending December 15, 1907, compared with the average for the previous twelve months; the latter averages are in brackets:

Typhoid fever, 39 (38); measles, 8 (12); scarlet fever, 26 (20); whooping cough, 19 (24); diphtheria, 52 (56); malarial fever, 3 (2); tuberculosis of lungs, 270 (312); tuberculosis of other organs, 32 (51); cancer, 112 (120); cerebro-spinal meningitis, 28 (29); diseases of nervous system, 352 (389); diseases of circulatory system, 318 (319); diseases of respiratory system (pneumonia and tuberculosis excepted), 175 (178); pneumonia, 216 (265); infantile diarrhoea, 106 (210); diseases of the digestive system (infantile diarrhoea excepted), 195 (196); Bright's disease, 203 (203); suicide, 36 (29); all other causes, 555 (583); total, 2,745 (3036).

Food and Drugs.—During the month ending December 31, 1907, 231 samples were examined under the direction of the State Board of Health, in the State Laboratory of Hygiene, of which 15 of the 45 samples of milk, one out of eight of butter and both of the two samples of opium were below the standard. Number of samples of water analyzed, 57.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 9.

ORANGE, N. J., MARCH, 1908.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

THE MEDICAL INSPECTION OF SCHOOLS.*

By Richard P. Francis, M. D., Montclair.

Vice-President of the Montclair Board of Health.

If a collection of representative medical men, say the New York Academy of Medicine, or the American Medical Association, or even an International Congress of Physicians and Surgeons, were asked, "What is the most important branch of medical teaching to-day?" the answer from the large majority would undoubtedly be, "Preventive medicine."

While the brilliant achievements in surgery during the past few decades have created universal surprise and admiration, they have surely been equaled, if not surpassed, by what has been accomplished in the field of preventing disease. The discovery of vaccination and the consequent checking of the scourge of smallpox more than one hundred years ago, for a long time was the most striking, if not the only example of a remedy that really prevented disease; but in the memory of all of us there have been many discoveries of a similar nature, and of equal importance. The various antitoxins, the destruction of disease-breeding mosquitoes, the restriction of typhoid fever by the purification of the water and milk supplies, the prevention and cure of tuberculosis by proper precautions of isolation and disinfection, and finally, and of greatest importance, the better chance for good health given by more carefully heeding the rules

of hygiene and sanitation, have all been means of preventing rather than curing disease.

There is probably no way in which more can be accomplished in this most important field than by seeing that children are allowed, or it might better be said, compelled to grow up in environments that will aid in giving a natural development. "As the twig is bent, so is the tree inclined." The strong, healthy child is the one that is most likely to become a useful citizen. These are truisms which are too often disregarded by medical men, as well as by others. Absorbed in the work of curing disease, physicians sometimes pay too little heed to preventing it.

The school life of the child is at a time when the young, pliant bodies yield readily to the influence of good or bad surroundings, and as a considerable portion of the child's day is spent in the school room, the importance of having the school surroundings of the best character cannot be overestimated. And it is just this which a medical inspection of schools, properly conducted, strives to accomplish. Not merely the detection of cases of scarlet fever, diphtheria or measles, or of pediculi, not merely a perfunctory examination of the pupils, hastily and carelessly conducted, but a careful, constant and thorough supervision over pupils and teachers—a supervision that extends naturally to the hygienic and sanitary conditions amid which they are for so large a part of each day.

It is a prerequisite for the proper performance of this work that the inspectors should be well trained, active, tactful, intelligent men and women, and that they should receive sufficient pay to make it

*Read at the November 15, 1907, meeting of the Orange Mountain Medical Society.

worth their while to devote a large part of their time to it. And it is of equal importance that the school authorities should co-operate in the work, as without this the time spent on the inspection is time wasted. It is also necessary that the work of the inspectors should be properly supervised and directed, and that there should be frequent conferences of the inspectors, so that they may all work in harmony.*

These essentials can be readily supplied in almost any community where the school population is sufficiently large to need medical inspection. The greatest difficulty will probably be found in securing a sufficient appropriation from the public funds; but it ought not to be difficult, after conducting a short campaign of education, to convince the proper authorities that a small appropriation for experimental purposes should be made; and after the work is once fairly begun its marked usefulness will make its continuance a simple matter.

After the essentials have been obtained and used for a short period, it will be necessary, as the scope of the work enlarges, to secure additional means. Assistants to the inspectors must be had, who can help materially in examining the pupils, and particularly in the lower grades, see that directions or suggestions made by the inspectors are carried out. The *medical inspection nurse* will be as necessary as the medical inspection doctor.

It is very important that the work of the inspectors should be considered a part of the routine work of the school, and not a thing by itself that interferes, more or less, with this routine. The co-operation of the school authorities with the inspectors, that has already been mentioned as essential, will make such arrangement of the school schedule that there need be but a minimum degree of interference with the studies or recitations. As an important aid to this end, there will have to be provided a room or rooms, to be used by the inspectors in examining the pupils.

While at the beginning these examinations will be to a certain extent superficial, the time will come when it will be practicable to give each pupil a complete physical examination, as thorough as what is now given to those who exercise in well-regulated gymnasiums.

Invaluable service can be rendered to the growing boys and girls if their physical characteristics are noted and advice given them concerning what they should or should not do in order to obtain the best development. In other words, in those schools that are provided with an instructor in physical training, there should be an active co-operation between him and the medical inspectors; their work is on similar lines, and important results will come from union of forces.

In a recent article, a writer (William H. Allen, Ph. D., in the *New York Evening Post*, September 21, 1907), has called attention to the need of a "thorough physical examination of all candidates for teachers' positions, and periodic examinations of accepted teachers. Other ailments more serious than tuberculosis are passed from teacher to pupil. Slovenliness, ugly temper, inaccuracy, "bluffing," coarseness, lack of ambition, cynicism—these should be blackballed on hygienic grounds as well as consumption and contagious skin diseases. Nervousness of teacher deranges the nervous organism of the child. Crooked thinking by teacher leads to crooked thinking by pupil. A man whose fingers are yellow, nerves shaky, eye unsteady and mind alternately sleepy and hilarious from cigarettes, can not convey pictures of normal, healthy physical living, nor can he successfully teach the personal and social evils of nicotine. A teacher who has never studied the social and economic injuries resulting from unsanitary conditions cannot properly instruct children in hygiene.

"Are our teachers examined? Are they permitted to continue in school rooms after tuberculosis is discovered? Are normal graduates given physical tests before being permitted to teach, and before being permitted to give four years to preparation for teaching? Teachers would be grateful to be told in time their own physical needs and the relations of their vitality to the vitality of their pupils."

It may perhaps be worth while to discuss in more detail what medical inspection should accomplish.

First—The control of contagious diseases and their practical elimination from the schools. This is the most striking feature of the work, and is sometimes almost spectacular in its result. One or two cases of suspicious sore throat, or questionable eruption, being promptly reported to the health authorities, investigation will show one or more foci of contagion that would probably

* Since writing this paper I have learned that in a neighboring city, where medical inspection has been employed for some years, *there has never been a meeting of the inspectors!* Of course there is lack of coöperation. Jan. 22, 1908.—R. P. F.

have been the starting place for epidemics, if they had not been opportunely discovered.

An incident of this kind actually occurred in Montclair about a year ago. At one of the school houses the inspector found two or three children who seemed weak and run down; further investigation showed that they were desquamating on the arms and legs; an immediate examination of the pupils in the other rooms was made, with the result of finding more suspicious cases, all coming from the same section of the town. The services of additional physicians were engaged, a house-to-house inspection was instituted, and as a result fourteen children were found who were in some of the various stages of scarlet fever. They were segregated in a small house, which fortunately could be hired, a nurse installed and an isolation hospital was started. No further cases developed, but there is no doubt that if the medical inspection in the school had not discovered the mild cases, there would have been an epidemic that might have been severe.

A similar experience, on a larger scale, was encountered in Chicago last winter, and is briefly, but forcibly, recounted in the *Bulletin of the Department of Health* of the city of Chicago, for March 2nd, 1907. The report is as follows:

"It's a poor time to begin the organization and equipment of a fire department when a conflagration is at its height. But the health department has been compelled to do something very similar. The alarm of an epidemic spread of the contagious diseases, sounded in the *Bulletin* last October, was not responded to until the last week in January, when the epidemics of scarlet fever and diphtheria had reached their height. The department was then furnished a hundred medical inspectors as the nucleus of an adequate organization for fighting the spread of contagion and the protection of the public health.

"During that week 7,867 school children were examined by the new inspectors, and of this number 1,616—or more than one-fifth, 20.5 per cent.—were found infected with the contagion of communicable diseases, and were excluded from school attendance. Up to the close of February a total of 48,155 children in attendance on the public schools had been examined. Of these 7,205—or nearly fifteen in every hundred—were either suffering or convalescing from a contagious disease and capable of spreading contagion among other scholars. There

were found 2,049 cases of diphtheria and tonsilitis, 695 cases of mumps, 686 of scarlet fever, 537 of measles, 228 of whooping cough, 198 of chickenpox, and 2,812 cases of purulent ophthalmia, impetigo contagiosa, scabies, pediculosis, etc.

"Nearly one-third (32.7 per cent.) of the total exclusions were on account of diphtheria and tonsilitis, and nearly one-tenth (9.5 per cent.) were on account of scarlet fever. Is it any wonder that these diseases have been epidemic?

"Had medical school inspection been re-established and continued, as repeatedly prayed by the department, it might not have wholly prevented the scarlet fever epidemic, since, as Dr. Frank Billings has pointed out, the growing infrequency of this disease since 1902 has resulted in the accumulation of an enormous crop of children susceptible to its infection. An epidemic among these was inevitable whenever the specific contagion—whatever it may be—should be introduced. But there is no question among sanitarians and students of preventive medicine that its ravages could have been greatly reduced and its spread effectually checked had the early cases been promptly recognized and measures of restriction duly enforced. Such recognition and such enforcement are possible only by and through an efficient system of medical inspection of the upwards of 300,000 school children—public, private and parochial—who are the continuing threat of epidemics if not properly safeguarded."

The control of communicable disease may be said to represent that phase of medical inspection that looks after the health of the community as a whole. But the care of the individual is equally important, and should embrace the major part of the work.

Communicable diseases are, fortunately, not always present, and if the inspectors limited their energies to detecting and controlling them, there would often be little or nothing to do. Particularly when the prompt isolation of a suspected case makes spread of the disease very unlikely. But individual children will always be found in schools who, for different physical or mental defects, need attention that, through ignorance or neglect, is not given them at home. And it is in detecting these and in endeavoring to have the defects remedied, that an important part of the duty of the inspector lies. It is often easier to point out the trouble than to furnish a remedy. Parents who are poor and ignorant cannot or will not understand why decayed teeth

should be filled, weak eyes fitted with proper glasses, adenoid growths removed, or even why heads infected with vermin should be cleaned. Or, if they are anxious that something should be done, they have not the means for doing it.

In the larger cities, like New York, much of this work is done for the poor at the public clinic, or is paid for by the health department. In smaller communities this is not always feasible. Still, many of the minor deficiencies can be remedied by the employment of a school nurse, or, as is at present done in Montclair, by employing a capable, thorough, untrained woman, who is taught how to clean the children's heads, assist them in taking baths, and in many ways make them fit to associate with others.

As a rule, however, parents are glad to have their attention called to physical defects in their children, and when notified about them, at least seek medical advice. Of course, there are always some people who raise the cry of "paternalism," and also object to any interference in their "private affairs" by officials. Such people insist on their inalienable right under the Constitution of the United States to have diseased or weak-minded children, and to allow them to grow up as defective citizens.

"The same hue and cry was raised, it will be remembered, when compulsory education was first discussed in this country. Compulsory care for the child's health is just as necessary as compulsory school attendance. The school children must be educated to regard the law as to compulsory treatment as one to be obeyed, and then the feeling that some of the children are charity patients attending a dispensary will be replaced by the simple idea that they are obeying a general sanitary law, like that providing for compulsory vaccination." (John J. Cronin, M. D., in *American Review of Reviews*, April, 1907, p. 485.)

Boards of Education, teachers, all members of the community, must be educated to learn the value of medical inspection. Like any other reform or innovation, it is bound to meet with a certain amount of opposition when first introduced, and it is by practical demonstration that this opposition is best overcome.

Of course it should be borne in mind that medical men and sanitarians have naturally, by the very nature of their calling, a much greater interest in health matters *per se* than the average educator or school trustee. It is, nevertheless, a matter of constant surprise that there is great difficulty in arousing

the interest of some teachers who are, from an educational standpoint, well equipped.

Three years ago the Board of Health of Montclair obtained from the Board of Education consent to have a medical inspection made in the schools, so that the physical condition of the pupils might be learned. The report showed, of course, that many abnormalities (of greater or less magnitude) existed, and permission was granted for the Board of Health to begin its work. A committee of two members from each board was appointed to take charge, and four inspectors were appointed, who were to visit the schools assigned to them twice each week, and more frequently if necessity arose. An appropriation of \$1,000 was obtained from the Town Council for carrying on the work for a year.

It was fully realized that only two weekly visits were, perhaps, hardly sufficient to enable the inspectors to keep as close a watch on the pupils as might be desirable, particularly in the lower grades, where the children come from the poor quarters. But in order that there might be no delay in starting work, it was thought best that only a modest beginning should be made, and it was felt that in a short time, one or two years, at most, the town authorities would realize the value of medical inspection and would gladly furnish funds for meeting the necessarily increasing expenses.

It is a pleasure to be able to state that our expectations were not groundless. While from the first the work was emphatically endorsed by many of the school authorities, particularly those teachers who had charge of the children from the poorer quarters of the town, there were many who simply tolerated it, and some who decidedly opposed it, one even declaring it to be "an unmitigated nuisance." And the attitude of the Board of Education was much the same; though there was little apparent active opposition, there was no enthusiasm, and it is no exaggeration to say that the Board of Health was allowed to carry on the work, rather than encouraged or aided.

In the two or three years that have since passed a marked change in feeling has been seen; there is no hostile criticism, there are scarcely any lukewarm admirers; the whole school force, from the Board of Education down, praises medical inspection and give active co-operation. In other words, the campaign of education on this particular line is being successfully waged, and there is little doubt that we shall be able to enlarge the scope of the work each year.

It should be noted that the parochial school is included in the inspection, the authorities of that institution having given permission two years ago. The inspector for this school has no other school under his supervision, and is paid by the town, like the other inspectors. The parochial school has, at its own expense, however, furnished cards for an index catalogue of the pupils.

The methods used in Montclair may be of interest. They are modeled on those of New York and Newark, but some of the details have been modified to meet local requirements. At the beginning of each school year there is a general inspection; that is, every pupil is examined by an inspector, and the result of the examinations is entered on a card that is filed with others in a cabinet. These cards are consulted whenever a pupil is seen at a subsequent date, and the necessary notes entered, so each card presents a complete medical school history of each pupil, and so gives valuable data of normal or abnormal conditions.

After the general inspection is finished, and this takes a week or ten days, the regular routine work is begun. Twice each week while the school is in session the inspectors visit the buildings assigned to them and examine those pupils who are sent to them by the teachers. The report of the case is entered on the record card. Each week a "weekly report blank" is made out in duplicate by the inspector, one copy for the Board of Health, the other for the Board of Education. These blanks show for each school building, the number of pupils examined, the reasons for the examination, and what disposition was made of the case. If when the pupils are examined, they are found not to be in normal condition, they are either at once excluded from school or are referred to the parent, the family doctor or the school attendant. In either case each pupil receives a card stating the reason for the exclusion or "referring." If referred to the parent or family physician, they must bring a note to the inspector stating that proper attention is being given to the case. By this means the inspector learns what, if anything, is being done for the abnormality and makes the proper memorandum on the pupil's reference card.

Before closing the account of the method of school inspection used in Montclair, it should be noted that the "general inspection" held at the beginning of each year is

much more thorough than that which is given in some other places.

In a recent number of the *Journal* of the American Medical Association mention is made of a general inspection in which 2,000 children were examined in ten minutes. Such a proceeding is, of course, a farce, and must have needed nothing more than standing before a room full of children and glancing over them.

In Montclair each child is examined in private by the inspector, and sufficient time is taken to note any abnormalities of eye, ear, mouth, throat or head, as well as the general appearance. Careful examination of these points gives much information about the pupil's condition, and as all findings are noted on the index card, it has been deemed not necessary to have a general inspection more than once a year. Of course a more extended examination of the pupil is desirable, particularly of the chest and its contents. But until the inspectors are paid higher salaries, so that they may be expected to give more time to the work, nothing further can be attempted.

EPIDEMIC PARALYSIS IN CHILDREN.*

By Henry Dwight Chapin, M. D.,
New York.

Professor of Diseases of Children, Post-Graduate Hospital.

The occurrence of epidemics of paralysis in children has been reported in recent years by a number of observers. They have generally been considered as cases of anterior poliomyelitis, and have naturally provoked renewed discussion as to the essential cause of this disease. The prevailing idea among recent writers appears to be that the spinal paralysis of children is an infectious disease, and occasional epidemics confirm this view. The abrupt onset, the fever, the gastric disturbance, occasional attacks of convulsions seen both in the epidemic and endemic forms of the disease point to its infectious nature. In the epidemic form, a considerable variation from the usual type of the disease has been noticed, some cases presenting the symptom complex of Landry's paralysis, the infectious nature of which is known. It must be borne in mind, however, that while the microbic nature of poliomyelitis may thus by analogy be assumed, it has not yet

* Read before the Morris County Medical Society December, 1907.

been scientifically demonstrated. Medin reported an epidemic during the summer of 1887 in Stockholm with some fatal cases. In this country Dr. Caverly has reported an epidemic occurring in the summer of 1894 in Rutland, Vermont. One hundred and thirty-two cases were reported, occurring oftenest in strong, healthy children. Many of the cases showed marked hyperæsthesia of the skin and others exhibited muscular rigidity of the neck or back. Eighteen of the cases were fatal, usually dying early in the attack. A curious feature of this epidemic was that domestic animals were affected by the disease. Horses, dogs and fowls became paralyzed and an autopsy on a horse and fowl showed the lesions of poliomyelitis. This epidemic occurred in a very dry season, and the same thing has been noted in most other epidemics.

An interesting epidemic, reported by the author, occurred during the summer of 1889 at Poughkeepsie, N. Y., most of the cases being attacked between the middle of July and the middle of August. A peculiarity of this epidemic appeared to be the existence of severe pain in the parts affected by the paralysis. A number of the cases carefully examined showed absolute paralysis of the limbs affected, with loss of reflexes, and apparently considerable pain on handling the part. There was such marked evidence of the action of some infectious principle that examinations of the blood from three cases were made by Dr. H. T. Brooks. These failed to give any positive results, although the specimens did show occasional minute micro-organisms (a diplococcus) to which, however, no etiological significance was attached because of the small number of specimens and also because the latter may have been contaminated from the skin or other source.

The prominent feature of pain and its more or less persistence in the affected limbs, brought up the question of neuritis. One of the cases proving fatal, a careful autopsy was made and the nature of the disease in this particular case was proven to be poliomyelitis. It seemed that while this epidemic was apparently of an infectious nature, in some cases the infecting principle attacked the anterior horn of the spinal cord; in others, the peripheral nerves, and that possibly, in a few cases, both parts were attacked. Some of the cases were reported by the physicians in attendance to have made complete recoveries in from one to four months. In both the Stockholm and Rutland epidemics, polineuritis was reported

to exist in some of the cases with poliomyelitis.

During the summer of 1907 an epidemic of considerable proportion existed in New York and the surrounding country. In this epidemic, pain in the extremities formed a marked feature and in some cases marked cerebral symptoms were noted. Many of the cases showed great gastro-enteric irritation at the onset of the disease. Occasionally headache and rigidity of the neck simulated cerebro-spinal meningitis. A few cases were reported in which symptoms of bulbar involvement occurred. A number of deaths were also reported during this epidemic, the fatalities occurring early in the disease. It is believed that the following points will fairly represent the peculiarities of the epidemic form of paralysis in children:

1—The disease is occasionally fatal, especially early in the attack. The endemic form is rarely, if ever, fatal in its ending.

2—There are great variations in the extent of the paralysis in the epidemic form. Many cases show very extensive palsy, involving all the extremities and the muscles of the back and neck as well. Other cases show a very slight loss of power and the disease is doubtless occasionally overlooked from this cause.

3—Pain seems to occupy a more prominent feature in the epidemic than in the endemic form. This pain may even last well along in the course of the disease. In the ordinary endemic disease, if pain exists, it is not apt to last more than a day or so.

4—A certain proportion of cases in these epidemics seem to undergo a complete recovery. This rarely, if ever, happens in the endemic form.

5—The lesion tends to be more varied and extensive in the epidemic than in the endemic form. It may include the following conditions: polio-encephalitis of Strümpell, poliomyelitis, peripheral neuritis, and occasionally meningitis.

APPENDICITIS DESCRIBED BY THE EARLY WRITERS.

By Edward J. Ill.

Kelly, in his book on "The Vermiform Appendix and Its Diseases," quotes Edebohls as reporting a case described by Messtivier in 1709, as the first recorded case of appendicitis. I believe the following case re-

ported by Laurence Heister, in a work published early in 1750 and translated by George Wirgman may prove of interest. My attention was first directed to the report by Dr. W. E. Cladek, of Rahway, N. J. The pathological description is so good that one would not go amiss to copy it as typical. The treatment suggested is no worse than the one suggested in our annual meeting of some years ago, when a "corn-meal poultice outside and one inside" was advised as a most excellent remedy.

OF AN ABSCESS IN THE VERMIFORM PROCESS
OF THE CAECUM.

"In the month of November, 1711, as I was dissecting the body of a malefactor, in the public theatre in Altdroff, I found the small guts very red and inflamed in several places, insomuch that the smallest vessels were beautifully filled with blood, as if they had been injected with red wax, in the most skilful manner, after Ruysch's method. But when I was about to demonstrate the situation of the great guts, I found the vermiform process of the cæcum perter-naturally black, adhering closer to the peritoneum than is usual. As I now was about to separate it, by gently pulling it asunder, the membranes of the process broke, notwithstanding the body was quite fresh, and discharged two or three spoonfuls of matter. This instance may stand as proof of the possibility of inflammations arising, and abscesses forming, in the apendicula, as well as in other parts of the body, which I have not observed to be much noticed by other writers; and when, in practice, we meet with a burning and pain where this part is situated, we ought to give attention to it. It is probable that this person might have had some pain in this part, but of this I could get no information. In such cases I look upon clysters prepared with emollient and discutient herbs, as such as mallows, marshmallows and cammomile flowers, and the like remedies against inflammations, boiled in milk, and used frequently, to be of excellent use, as they reach the part, and may resolve the inflammation or bring the abscess to a suppuration, partly by their warmth, partly by their resolving and discutient qualities, opening the abscess, that the matter may be discharged by stool, and the patient hereby may be saved, which, when the parts in the abdomen become corroded, can scarcely happen, but death must follow."

The triad of symptoms—pain, vomiting and distention—without fever, points to intestinal obstruction.

INCIPIENCY IN TUBERCULOSIS FROM THE STANDPOINT OF SANATORIA*

The Safety and the Value of the Tuberculin Test When Safeguarded Solely by the Clinical Method.

By Henry B. Dunham, M. D.,
Glen Gardner, N. J.

Recently Physician Massachusetts State Sanatorium; Assistant Chief Physician New Jersey Sanatorium for Tuberculous Diseases.

The prevalence of tuberculosis and the profession's ignorance of its commencement in almost all the cases that occur can be shown best by citing statistics from States having sanatoria. There are, presumably, as many as 15,000 cases of tuberculosis in Massachusetts. In the reports received by the investigating commission,¹ 7,779 consumptives were positively accounted for within the State, but if these were all, then less than half of those afflicted would survive a year, as the latest death rate is 4,702.² It would be impossible to determine how many more than 4,702 cases originate each year in Massachusetts, but that many are required to supply the annual deaths at home. Those who may die in other States and climates and those who recover either at home or abroad, are not included in the above estimate of those who contract the disease in a single State. Among the 7,779 consumptives who were reported to the Commission, 2,792 were designated by physicians as "slightly ill" and "feeling able to work."

With conditions existing as stated, does it not seem strange that a State institution, accommodating 350 patients, upon which the people gladly expend vast sums to assist it in effecting recoveries should barely be able to fill one-third of its beds with slightly affected cases? At the Massachusetts State Sanatorium 75 per cent. of the patients with incipient disease recover, and they rarely relapse. Is it not unfortunate that circumstances should cause 400 of those who develop the disease every month, to ignore absolutely, or invariably until too late, such an available means of treatment, especially as no other treatment is undertaken which suffices to prevent a fatal termination?

*Published also in the Medical Record.

The reduction in the death-rate from tuberculosis since 1881 has been continuous, but thousands of lives are still lost yearly. If a special effort should be made by physicians, might not the disease be detected and receive treatment in its incipency in perhaps one-sixth of the, at present fatal, cases? If this were done Massachusetts could care for its proportion of cases with its present equipment. No State sanatorium has as yet been furnished with incipient tuberculosis to its full capacity, and the curable cases take precedence over all others seeking admission. Eighteen States will have sanatoria in 1908, and patients with incipient tuberculosis will be required that these institutions may accomplish their highest end. At present every State sanatorium is in advance of the willingness or ability of both the people and the profession to supply it with incipient tuberculosis. The superintendent of the Rhode Island Sanatorium deplors this state of affairs as follows:³ "If the number of curable cases which a sanatorium receives is small, its usefulness is correspondingly limited, and our professional pride should not allow the willingness of the State to finance the treatment of curable cases to surpass our ability to furnish the cases."

The willingness of the State has nevertheless surpassed the ability of the profession in Massachusetts, New York and Rhode Island since the erection of their respective sanatoria. The superintendent of the New York institution makes this statement in his official report:⁴ "As a result of two and one-half years' actual experience at this hospital, I find that incipient disease is practically unknown to the profession save to those actually engaged in special work along this line."

The number of new cases of Tuberculosis Pulmonalis reported December 7, 1907, to the Sanitary Bureau, Health Department, New York City, was over double that of the deaths occurring in the same week. As in New York State 14,000 deaths occur annually from consumption, it may be assumed that twice 14,000 patients could be reported as contracting the disease in the same time; nevertheless, fifty beds (out of a total of only two hundred) remain empty at the State Hospital, Raybrook, because it is impossible to obtain that number of patients with incipient disease.

In the New Jersey Sanatorium, at the present writing, less than 13 per cent. of the patients have incipient disease, the average duration of symptoms is reckoned

in years, many have marked febrility with advanced processes, and a few, in addition, ulcerated larynges. These apparently were the best obtainable cases, with inability to pay constituting not the slightest bar to admission. Each applicant has to be certified by his examiner, as having "tuberculous disease of a curable nature." There are more official examiners in New Jersey than in other States having sanatoria, and 66 per cent. of all applicants so far have been accepted. About 45 per cent. are taken in Massachusetts, while in New York, at the Department of Health Clinic, 16 per cent. were accepted, and in Buffalo the examiner, Dr. Pryor, recommended only about 7 per cent. of those applying for Raybrook.⁴

In Rhode Island,³ 50.9 per cent. of about two hundred consecutive cases admitted to their institution had delayed an average of 7.9 months after the onset of symptoms before consulting a physician, most of the remainder, or 46 per cent., had consulted a physician some time after the symptoms had been in progress two months, received an incorrect diagnosis, and, as a result, waited an average of 11.3 months before the presence of tuberculosis was established and proper treatment prescribed. The results of treatment, as might be expected, were more unfavorable with the latter set. From these statistics of Dr. Barnes we can deduct the following charitable conclusions: A patient, suspected of having tuberculosis, who is put off until "another time" will probably have too well marked disease when the evidence, not at first eagerly sought, pronounces itself. A person with tuberculosis who thinks he has been passed upon as sound, will cling to that impression for months after the individual without that impression has become quite certain of the character of his symptoms.

The patient with tuberculosis is greatly to be blamed for not early seeking medical advice; but when physicians are actually confronted with the opportunity, they often fail to make an early diagnosis of tuberculosis. Why is this? The literature pointing out the way is voluminous, and I am not referring to some subtle "pre-tuberculous" state; nor do the reports of professional inadequacy quoted owe their existence to the specialists' too exalted viewpoint in regard to incipency; on the contrary, ordinary sanatorium incipient cases can be diagnosed in the majority of instances merely by careful attention to the history and symptoms of the patients, as described by Otis.⁵ *Anything abnormal* in the apex of a lung is of

itself enough to warrant a tentative diagnosis which can be definitely settled by tuberculin, preferably after the patient has started treatment. The type of "incipient" tuberculosis which is received for treatment at Rutland can be diagnosed in 66 per cent. of the cases without recourse to other data than that derived from examinations of the sputum. This statement is not intended to encourage too long delays for a positive report on sputum, but is made chiefly to show clearly that, in seeking patients in the "incipient" stage, sanatoria are not asking physicians to draw unduly upon their imagination, nor to decide recommendations offhand upon general principles.

At Rutland, the diagnostic use of tuberculin has been found to be a requisite in the establishment of a positive diagnosis in less than one-sixth of the cases there classified as incipient. That sanatoria should receive a greater number of cases in which the resort to tuberculin becomes a more common necessity, is beyond refutation. Tuberculin as a diagnostic agent should also be more generally employed. Before coming out, however, too strongly on this aspect of remedial possibilities, let us not forget that nearly five thousand doomed to die yearly of tuberculosis in a model State, like Massachusetts, certainly receive no diagnosis which exerts a nullifying influence upon that ultimate result; when at this stage of medical progress it might be expected that without assistance from tuberculin a large number of these victims should have had their disease known by its symptoms and under treatment early enough to effect a material reduction in the quoted death rate. It is certainly true that our opportunities for successful treatment exceed our capacity for complying with the treatment's conditions of success.

If general practitioners and specialists of all branches of medicine everywhere, could only develop an alertness to tuberculosis which is the prime requisite for the intelligent use of tuberculin, then indeed the State and perhaps the National Government might be taxed to its utmost in an endeavor to keep pace with the profession and its auxiliaries. The sanatorium might then be succeeded by influential employment bureaus which could, for instance, among other things entailing no further expense, doubtless make the present Rural Free Delivery System add much to its sphere of usefulness.

Let us hasten the time when tuberculin will become a more commonly used agent

in diagnosis. The diagnosis of tuberculosis by means of tuberculin is becoming more than ever available to the general practitioner. Calmette's method,⁶ through application of the opthamo-reaction, furnishes what has long been needed, a simple and readily available test which, even if not absolutely conclusive in every case, can prepare the way for more exhaustive measures when the results with it are negative.

One drop of a 1 per cent. solution, or less at first, of purified tuberculin (Tuberculin precipitatum) is instilled into the conjunctival sac of the patient's eye. If the patient is tuberculous, a decided congestion and a watery and serofibrinous exudate occurs between three and twenty-four hours later. The larger experience of others as well as a few tests of my own have given almost uniformly positive results in cases of definite tuberculosis, and without reactions occurring in the presumably well. The percentage of error is probably a little more than with tuberculin used hypodermically. Until the experience with it covers very many more cases than at present, it would be wise to use tuberculin in the usual manner after all negative instillations, when the symptoms still point to the possible existence of the disease. When this is done the initial dose injected need not be as small as would otherwise be deemed advisable. Opportunities for inaccuracy and carelessness in the hypodermic method of administration are plentiful, but not more so than with many, now familiar, painstaking medical accomplishments. When properly administered tuberculin is a thoroughly reliable means of obtaining evidence of tuberculosis and when cases are selected carefully it is perfectly harmless. A report of my experience with it at Rutland should serve to strengthen this statement and also be a step toward answering questions which have some bearing upon the practical use of this valuable diagnostic aid. During the past year the great impetus to tuberculin therapy given by Trudeau has been shared somewhat by the same agent applied diagnostically. There is no doubt but that those who formerly opposed its use did so largely owing to the "difficulty of obtaining a reliable product,"⁷ or because "unconvinced of its innocuousness."⁸ An increasing demand and added experience have practically done away with the first objection, and its successful use in the therapeutic field has helped to do away with the second.

With many earlier writers⁹ on the diagnostic use of tuberculin, there was a preva-

lent opinion that the tolerance produced by very small repeated injections interfered with its reacting qualities and that a reaction might be absent or not nearly as distinct and decisive as when only a few larger size doses were administered. The dosage which is at present recommended and satisfactorily employed by almost all observers¹⁰ at the commencement is very small. A fraction of a milligram which is often cautiously repeated¹¹ before an increased dose is injected. That a tolerance to tuberculin is nevertheless easily established is a fact familiar to all, as it is upon this possibility that its therapeutic use depends.

It will now seem paradoxical to state that tuberculin has a marked cumulative property,¹² and that this sometimes even shows itself suddenly when it is being administered for the purpose of immunization, as in the hypersensitive cases described by Trudeau.¹³ It is a well-known fact that the same dose of tuberculin which has been found insufficient at first to produce a reaction, when repeated may cause a marked reaction. It would be well if we could always tell in the diagnostic administration just when and at what point the cumulative tendency ceases and tolerance begins. Theoretically it is the overlapping of negative phases which constitutes the cumulative effect and if it were always possible to obtain easily a correct opsonic index to tubercule bacilli, the border line between these opposite effects of tuberculin could doubtless be drawn in all cases. Opsonic work requires much time, and as there seems to be a doubt as to the possibility of complete accuracy¹⁴ with this particular subdivision of opsonic work as at present developed, interest must still cling to the clinical method¹⁵ in all tuberculin administration.

In order to give an idea of what can be accomplished by clinical methods in the selection of cases suitable for receiving large doses of tuberculin, the following experience with tuberculin in the earlier cases at the Massachusetts State Sanatorium is given. The incentive for painstaking care in the selection of these patients can be best understood by stating that each patient received but one dose of tuberculin and that dose was 10 milligrams. The deviation from the accepted method (that of administering gradually ascending doses up from a fraction of a milligram) was not owing to the absence of a proper spirit of caution, but came as the result of our experience with the first patients to receive tuberculin at Rutland, who from hearsay evidence were

filled with distrust of the agent, and usually refused their consent to more than one injection. At one time it was in many cases impossible to obtain consent to even an initial dose, some patients preferring discharge to submission to a single injection. Since the successful use in later years of tuberculin as a therapeutic agent, consent to the test has been easily obtained and the graduated increase of the injections up from small amounts has been a much more general procedure. Patients with plenty of evidence of the disease may show reactions to an initial therapeutic dose of 1-100 or even 1-500 mg.¹² The circumstances stated, which induced the administration of a large single dose of this diagnostic agent, also induced the physician to exhaust with the greatest care every other means of diagnosis, and encouraged especial thoroughness with both the physical and microscopical examinations. Patients having evident and definite physical signs at the apex of a lung would seldom receive a dose of tuberculin, and never a dose of large size.

In a few cases not mentioned in this tabulation, trust was placed in the establishment of the diagnosis by a smaller single dose. This was on account of the presence of more pronounced symptoms demanding greater caution in the exhibition of the agent. From the opening of the sanatorium in October, 1898, to June, 1907, while the writer was resident assistant to Drs. Bowditch or Otis, tuberculin was given diagnostically in initial maximum (10 mg.) doses, to 167 patients; reactions followed in 100, no reactions in 67. The per cent. of positives was 69.9; of negatives, 40.1. Two of the number above, who failed to react, gave a little sputum, just before the injection with tuberculin, in which a few tubercle bacilli were found. There was no sputum obtained after this from these two people. One other patient, giving a history of rather large hemoptysis, without cardiac murmur or other assignable cause than tuberculosis, gave no evidence of a reaction to this dose of 10 mg.

In measuring the doses of tuberculin the greatest care was exercised to insure accuracy. The tuberculin was weighed and then diluted with sterile water to make a solution of such strength that each minim contained one milligram of tuberculin. The solutions were always freshly made.* A particular dropper was kept purposely for measuring the pure tuberculin. With this dropper it

*See directions for preparing solution at end of this paper.

was repeatedly found that five drops weighed 180 mg. and one drop 36 mg. Consequently one drop of tuberculin thus measured, when diluted to 36 minims with sterile water, gave a solution of which 1 minim contained 1 mg. of tuberculin. Ten minims of this solution (measured with a special dropper) was put into an aseptic glass hypodermic syringe with enough more sterile water to make about twenty minims to be injected.

Estimating that nearly one drop of this might have remained in the needle uninjected, then the patient received perhaps one-half a milligram less than was prepared. As the Saranac tuberculin was always reported as a little stronger or more concentrated than Koch's standard, this loss was considered to have been overcome. The tuberculin used during the first five years at the sanatorium was furnished through the kindness of the Saranac laboratory. Dr. Baldwin described it as being, if anything, a little stronger than Koch's standard. Later some imported Koch's tuberculin has been used. In none of the cases which received this maximum initial dose can it be said that anything more than perhaps a temporarily deleterious effect resulted. If special care, however, had not been exercised in the selection of the cases, without doubt considerable injury might have been inflicted. The temperature reactions of the 167 patients who received the maximum dose initially were as follows:

32.13	per cent. had.....	99° to 100°
24.99	" " "	100° to 101°
21.42	" " "	101° to 102°
14.28	" " "	102° to 103°
7.14	" " "	103° or slightly above

The reactions took place most frequently during the evening following that on which the injection was given, but in quite a number of instances the reaction did not occur until nearly 48 hours had elapsed. The temperature and pulse were taken every two hours during the day and three or four times during the night on two or three days following the injection. It will be seen from this table that the majority had comparatively little fever (under 101°).

The daily routine was continued the same with all until the occurrence of a sufficiently marked reaction to necessitate rest in bed. As the height of the reactions occurred usually about bedtime, there were but few that actually became bed patients during the day as a result of the test. Only about 15 per cent. were kept in bed an entire 24 hours or more. This percentage of reaction seems low when contrasted with the reported re-

sults upon the soldiers in a Prussian regiment, where the reactions occurred in 60 per cent. of an entire company. The sanatorium cases were selected because suspiciously tuberculous. The Swiss-German recruits had been selected because supposedly sound. I have always felt confident that if these same Rutland patients could have had the identical dose of tuberculin while in their environment prior to admission to the sanatorium, the reactions would have been much more marked than was actually the case afterward while under sanatorium régime.

The open-air, rest treatment has a powerful effect upon any elevation of temperature produced through autoabsorption of tubercle virus. Why, then, should it not influence the temperature elevating power of tuberculin when deliberately injected? Madison's¹⁷ series of 400 consecutive patients admitted at the Danvers Insane Hospital reacted in 40 per cent. of the cases, and he quotes Beck's¹⁸ series of 2,137 unselected cases with 1,154 reactions, or 54 per cent., and Zahn's¹⁹ 6,320 autopsies in which he found tuberculosis present in 32.5 per cent. of all cases. In the cases at the sanatorium, tuberculin was not administered unless the presence of tuberculosis was strongly suspected. The patient was always admitted because of definite symptoms and generally because referred by some physician.

I think that the data on the frequency of latent tuberculosis, which runs up into even much higher percentages than those given, has served merely to confuse and befog the minds of practising physicians when confronted with the necessity for making a diagnosis of the clinical type of early tuberculosis, and it furnishes them with an apparent excuse for not becoming especially active in the establishment of a diagnosis with suspected cases. There is, however, a vast difference between the latent or non-symptomatic and the active or symptomatic types of this disease.

In the opinion of all experienced observers 10 mg. is an unusually large dose and seldom necessary. Few certainly have had the temerity to give an initial maximum dose in so many cases. The practice is not advocated, but the statistics are offered in order to show the possibilities of the "clinical method" for the tuberculin test, and to estimate the degree of influence ascribable to a cumulative effect when tuberculin is given diagnostically in rapidly ascending or repeated medium size doses. At the Massachusetts State Sanatorium since 1905 tuber-

culin in graduated increasing doses has been given to 96 patients. Reaction followed in 70 patients, or 72.9 per cent. The reactions with this method of dosage are increased 13 per cent. over those with single injections, and it will be seen that, owing doubtless to the cumulative property of tuberculin, a maximum dose given after a succession of smaller doses may sometimes cause a reaction when an initial maximum dose would fail. The interval between doses was about four days.

The subsequent history of the patients who were discharged on account of absence of reaction to tuberculin, although very incomplete, furnishes the fact that scarcely any patient reapplied for admission to the sanatorium, and this notwithstanding they were all cautioned to keep the possibility of tuberculosis in mind and return for examination if suspicious symptoms were noticed. The short period of education at the sanatorium which these people always had, doubtless must have been responsible for a considerable change for the better from their former mode of living, and this would exert a favorable influence upon their after history. With the patients, however, who, after reacting to tuberculin and remaining under treatment, were finally discharged with the disease arrested or apparently cured, there have been a few who have since relapsed, and two or three that, four to six years after their discharge, have died of tuberculosis. These data, so far as they go, indicate that the dose of tuberculin which was employed to differentiate the tubercular from the non-tubercular must have been essentially correct.

I do not believe we can ever know the exact minimum dose which will produce febrile reaction in health. Age, extremes in body-weight, the conditions of the nervous system, etc., doubtless would be factors affecting to a greater or less extent the size of the dose required. Injections of sterile water have been used where it was thought that the neurotic element in a case would alone be responsible for some of the features of a reaction. In some institutions the initial dose of the tuberculin test is frequently merely water.

In using tuberculin diagnostically the lungs should be examined and the signs recorded before the test, and careful comparisons made about 24 hours and 48 hours after the tuberculin injection. The sputum, if any, should also be examined at this time, *i. e.*, during the period of anticipated reaction. Occasionally the evidences of a re-

action come only through these sources, the rise of temperature and symptoms of malaise being very slight indeed.

In order to give a still better idea of the character of the cases of suspected tuberculosis in which tuberculin was used at Rutland, I would say that of 2,749 patients admitted to the sanatorium in three and a half years, the first sputum examination revealed tubercle bacilli in 1,516 cases, later examinations in 477 cases. The sputum examinations were always negative in 640 cases, and there was no sputum at all in 126 cases. Of these 757 non-bacillary cases, (a) 30 per cent. gave a history of hemoptysis and had definite physical signs of tuberculosis; (b) 28 per cent. had symptoms and physical signs so definite and evident that tuberculin was not used; (c) 24 per cent. were discharged, left of their own accord, or had such brief examinations that their cases were not classified or considered; (d) 20 per cent. were given tuberculin diagnostically, of these 60 per cent. reacted and remained, and 40 per cent. did not react and were discharged.

I think perhaps the most interesting fact which can be brought out in connection with these statistics is that, given the facilities for thorough search, it is possible to secure positive diagnosis without tuberculin in over 95 per cent. of all tuberculosis patients who are commonly seen by examiners for sanatoria, and this to a large extent excludes the hopeless cases. Even estimating that those patients who left the sanatorium almost immediately after entrance and in whom no proper examinations or tests could be made, would all have required tuberculin before 60 per cent. could be designated as positively tuberculous, then there would be but 200 (or 3.7 per cent.) out of approximately 5,331 applicants with tuberculosis, whose disease could not be positively diagnosed without sputum, and were diagnosed through sputum (89.9 per cent.) or by hemoptyses and other definite evidence (7.3 per cent.).

As only about one-third of the patients at Rutland have been admitted in the incipient stage, it is evident that this ability which we have shown in making a positive diagnosis of tuberculosis without tuberculin in over nine-tenths of all cases accepted, is not, after all, extraordinary. The average duration of symptoms in patients prior to admission has been every year, approximately, ten or twelve months. It is well to note in the above that several hundred with incipient tuberculosis would have been left to the further unchecked ravage of the disease if re-

liance upon the first reported absence of tubercle bacilli had satisfied the physician's diagnostic curiosity.

Of 1,993 patients who had tubercle bacilli in their expectoration, and were resident at the sanatorium several months each, out of 14,000 microscopical examinations 708 patients only gave continual evidence of the presence of tuberculosis through their sputum.

It should be stated that the term "incipient" as defined by the National Association for the Study and Prevention of Tuberculosis, deals less with data which determine the duration of the disease than it does with points affecting the prognosis of the case. If the conditions are favorable and the lesion slight, tuberculosis need not necessarily be discovered early, in order to earn the appellation "incipient."*

One might expect that physicians would use sanatoria oftener as places where suspected cases can receive the tuberculin test. Let us hope that conditions will improve and that, in the future, by assistance from anti-tuberculosis societies and health inspectors, physicians will be given an opportunity to see and pass careful judgment upon more cases in which the disease is slight or really beginning. Then tuberculin used both by the opthalgo method and by injection can perhaps be the most efficient single agent there is in lowering the death rate.

DIRECTIONS FOR PREPARING TUBERCULIN SOLUTION.

*Those who do not bear in mind the necessity for using freshly prepared solutions might be misled by the directions commonly given for preparing the dilutions, such as for example were given in an article on "The Opsonic Index and the Tuberculin Test," by Rotch and Floyd:¹⁶ "The solution for using this test is prepared as follows: One cubic centimeter of Koch's old tuberculin is added to 999 c.c. of boiled distilled water—one c.c. of this solution equals one milligram, the dose of this," etc. Without being cautioned against it, and having made up this solution of 1,000 c.c. for a few tests, an economist might save the bulk of the remaining solution for subsequent use, not realizing that for careful testing the dilution in a few days at most would be worthless. In a personal communication on this subject to the writer, Dr. E. R. Baldwin of Saranac stated in 1904: "I believe that it is often true that the preparation is not freshly diluted for each dose, nor always carefully prepared in making the dilutions. I have known at least one instance where negative results were uniformly obtained from an active tuberculin because the dilutions were not freshly made." The original concentrated tuberculin also tends to deteriorate in time, as shown by Madison,¹⁷ who compared the contents of freshly opened bottles with that of those opened months before, and found less marked activity with the latter. Besides keeping it in "a dark, cool place" it is sometimes well to transfer it to a sterile tight glass-stoppered bottle, after opening the

original package, because the glycerin which enters so largely into the composition of tuberculin tends to absorb moisture from the air, thereby slightly diluting the preparation.

CLASSIFICATION OF APPLICANTS FOR ADMISSION TO STATE SANATORIA.

*The Classification upon which applicants are admitted to most State Sanatoria is that adopted by the National Association for the Study and Prevention of Tuberculosis, viz.,

Class 1, Incipient (Favorable).—Slight initial lesion in the form of infiltration limited to the apex or small part of one lobe. No tuberculous complications. Slight or no constitutional symptoms (particularly including gastric or intestinal disturbance or rapid loss of weight). Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest. Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent.

Class 2, Moderately Advanced.—No marked impairment of function, either local or constitutional. Localized consolidation moderate in extent, with little or no evidence of destruction of tissue; or, Disseminated fibroid deposits. No serious complications.

Class 3, Far Advanced.—Marked impairment of function, local and constitutional. Localized consolidation intense; or, Disseminated areas of softening; or, Serious complications.

It is the purpose and policy of sanatoria to admit at once applicants of the first class. Those of the second class are admitted if there are not enough of the first class applying to fill the beds, if in the judgment of the superintendent the treatment at the sanatorium will materially benefit them. Those of the third class are not admitted, nor are they advised that at any future time they will be admitted.

REFERENCES.

1. Report of the Commission (Commonwealth of Massachusetts) to Investigate Measures for the Relief of Consumptives, January, 1907, Senate No. 330; p. 10.
2. Thirty-Eighth Annual Report, State Board of Health of Massachusetts, Pub. Doc. 34; p. 650.
3. H. L. Barnes: Mistakes in the diagnosis of pulmonary tuberculosis, *Jour. Am. Med. Assn.*, February 16, 1907.
4. Sixth Annual Report of the Trustees of the New York State Hospital for Incipient Tuberculosis, pp. 14 and 15 (January, 1907).
5. Edward O. Otis: The Early Diagnosis of Pulmonary Tuberculosis for the General Practitioner, *Boston Med. and Surg. Jour.*, September 12, 1907.
6. A. Calmette and Pasteur Institute associates: Ophthamo-reaction tests, a report of 321 cases, *Presse Médicale*, July 13, 1907. E. R. Baldwin: *Jour. A. M. A.*, December 14, 1907, p. 1971. H. M. King: *Medical Record*, December 14, 1907, p. 978.
7. *Therapeutic Gazette*, Editorial, November, 1907.
8. V. Y. Bowditch: *Boston Medical and Surgical Journal*, February 8, 1900, p. 146.
9. Heron: *Phil. Med. Jour.*, September 21, 1901, p. 494. White: *Boston Med. and Surg. Jour.*, 1897, p. 123. Whittaker: *Cincinnati Lancet-Critic*, September 11, 1897, p. 245. Head: *St. Paul Med. Jour.*, September, 1899, p. 651.
10. Hawes and Floyd: *Boston Medical and Surgical Journal*, May 30, 1907.

11. Roth-Schultz: Beiträge zur Klin. der Tuberkulose, 1906, vi., p. 167.

12. Hammer: *Münchener med. Woch.*, November 27, 1906.

13. Trudeau: *American Journal of the Medical Sciences*, August, 1906.

14. Jeans and Sellard: Bull. of the Johns Hopkins Hosp., July, 1907. Bolduan: *L. I. Med. Jour.*, Vol. I., No. 10, 1907. Potter: *Jour. A. M. A.*, November 30, 1907, p. 1824.

15. Trudeau: *American Journal of the Medical Sciences*, June, 1907.

16. Roth and Floyd: *Jour. Am. Med. Assn.*, August 24, 1907.

17. Madison: *American Medicine*, December 20, 1902, p. 975.

18. Beck: *Deutsche med. Woch.*, No. 9, 1899, p. 137.

19. Zahn: *Münchener med. Woch.*, No. 2, 1902, p. 49.

CLASSIFICATION OF CASES OF APPENDICITIS.*

By John J. McGrath, M. D., New York.

Professor of Operative Surgery at the New York Post-Graduate School and Hospital; Visiting Surgeon to the Harlem and Columbus Hospitals, etc.

In a case of suspected appendicitis it is not sufficient to make a general diagnosis of inflammation of the appendix. It is of the greatest importance to go a step further and diagnosticate the exact character of the lesion in order to determine the proper method of treatment suitable to the individual case. The question of immediate operation or the propriety of temporizing depends entirely upon the nature of the attack—upon the exact pathological condition that we have to deal with.

There are three different clinical forms of appendicitis which are to be considered, and these may be described in brief as follows: First, the simple catarrhal, which may be either acute or chronic; second, that form which is associated with a circumscribed abscess; and third, that which is characterized by acute gangrene of the organ, without the formation of limiting peritoneal adhesions, and therefore necessarily associated with more or less peritoneal infection. We encounter occasional cases of tuberculous appendicitis, but a consideration of this form of disease may be disregarded at present, so as not to confuse the more important features that it is especially desirable to bring out.

The simple catarrhal form of appendicitis, the non-suppurative, may be either acute or chronic.

*Read before the Middlesex County (N. J.) Medical Society, October 15, 1907.

Printed in the N. Y. Medical Record, Feb. 8, 1908.

In the acute cases the appendix is found more or less enlarged, swollen, congested, the small superficial veins in the serous coat injected and plainly visible; the wall of the organ is infiltrated with inflammatory products and mucous or mucopurulent material is found in the lumen. The lining mucous membrane is red and swollen and often shows ulcerated areas, and the lumen of the organ may be more or less narrowed or obliterated through the swelling of the mucous layer. There may be flakes or patches of fresh fibrin around about the appendix agglutinating it to the adjacent peritoneal structures. The mesoappendix is thickened and its blood-vessels injected, and it may be adherent to the adjacent peritoneal structures. After the acute attack has subsided, and especially if there have been several preceding attacks, there may remain organized connective tissue bands that fix the appendix to the adjacent peritoneal organs and surfaces, limit its mobility, and cause kinking or torsion of the organ. Healing of ulcerated areas in the mucous membrane may leave the lumen strictured or the entire lumen may have become narrowed or obliterated through the inflammatory thickening of the wall of the organ, and one or more fecal concretions may be left remaining within the appendix; thus, when these patients with so-called simple acute catarrhal appendicitis escape operation and apparently recover, many are left with a dangerously damaged appendix, one readily susceptible upon slight provocation to renewed attacks.

In the chronic cases the appendix may exhibit but little gross change. It may be simply thickened or its lumen may be obliterated, due to a gradual increase of the connective tissue elements of its wall. The veins in the serous coat are injected and plainly visible. The lumen may be strictured and the mucous lining membrane show areas of ulceration. A fecal concretion may be contained within. There may be present adhesions that kink or twist the appendix, limiting its mobility and fixing it to the adjacent peritoneal parts—at times it is found adherent to the right tube and ovary.

These so-called catarrhal cases, acute and chronic, are characterized by the absence of perforation, gangrene, or abscess formation.

In the second group of cases, the abscess cases, we find the inflamed appendix, enclosed in an abscess cavity containing a varying quantity of foul-smelling pus. The walls of the abscess are formed by the adjacent peritoneal surfaces, coils of small in-

testine, cecum, and omentum, held together by recent inflammatory adhesions. After the adhesions have been broken up and the abscess opened, the appendix, intensely congested and swollen and may be or may not be perforated or presenting areas of gangrene, is found adherent to the wall of the cecum upon its outer or its inner side, or curled up underneath the head of the cecum and coils of small intestine, its tip pointing upward, or else it may reach down into the pelvis, where it may be adherent to the side of the bladder or involved in an inflammatory mass made up of the right tube and ovary. If the appendix is already perforated the opening may be seen, usually nearer the free end, the concretion having already escaped or else presenting at the opening in the appendix. Occasionally we find the appendix still intact and with a concretion easily felt within it. The mesoappendix and adjacent omentum are found intensely congested, red, thickened, and stiff and brawny. The abscess is situated according to the position of the appendix to the outer or to the inner side of or underneath the head of the cecum, or extending down into the pelvis alongside of the bladder. In these abscess cases the limiting adhesions may break down, maybe through transporting patients from home to hospital, and as a result we get leakage of the pus, with a general or progressive peritonitis.

The third group of cases is marked by the absence of protective peritoneal adhesions and by the necrotic character of the lesion. The appendix is found congested, swollen, thickened, red, with gangrenous-greenish black areas, and usually already perforated, or in some cases where the process is more pronounced and very rapid, the entire appendix may have become gangrenous and present the green-black appearance which is characteristic of that condition. There may be patches of fresh fibrin upon the adjacent peritoneal surfaces, but no effort at adhesions or walling-off of the diseased appendix has been made—the process has been too quick—more like an acute gangrene due to interference with the circulation, to thrombosis and occlusion of the blood-vessels of the appendix, than to an inflammatory process. Primarily the process may have been inflammatory, but the destructive element entirely overshadows the inflammatory and the necrosis occurs so quickly, so abruptly, that there is not sufficient time for protecting adhesions and an abscess to be formed. Some of these cases show complete absence of any inflammatory element whatever, and

the appendix is found as a thin-walled, flaccid, black, gangrenous tube, sloughed throughout its entire length, clear up to the cecum. Several cases have been seen by the writer where this condition obtained—one with the green-black sloughed appendix completely severed from the cecum. Probably these conditions are the result of infectious thrombosis of the veins that drain the appendix, or else of interference with the circulation, due to compression of the engorged, swollen organ within its unyielding serous outer envelope or around a concretion contained within its lumen. In some cases the adjoining part of the cecum shows a similar gangrenous appearance. The blood vessels of the appendix are found blocked with septic thrombi. When the abdomen is opened there escapes a varying amount of serous, turbid, sticky fluid. If diagnosed early and operated upon promptly we may find the process not so far advanced, the appendix still unperforated and with little fluid in the peritoneal cavity.

DIAGNOSIS.—The question is whether it is possible to differentiate between these several conditions clinically. I believe that it is in most, if not in all, cases, and this definite, accurate diagnosis is of the greatest practical importance, in the first place, in order to determine the proper method of treatment, and, in the second, in order to arrive at a proper prognosis as to the outcome of the case. The mortality from appendicitis is due to failure to differentiate and to recognize the bad cases sufficiently early.

In the first group of cases we have to do with a catarrhal inflammation which may be either acute or chronic.

Chronic catarrhal appendicitis is not an uncommon condition. It is probably not always a distinctly localized inflammation of the appendix limited to that organ alone, but oftentimes rather part of a general disturbance of the intestinal canal—the appendix giving mild symptoms every time that a greater degree of congestion of the organ causes it to swell within its serous envelope, with a resultant narrowing of its lumen, especially its mouth, and interference with proper drainage—discharge of its secretions. The chief symptom in this set of cases is the more or less constant feeling of discomfort associated with occasional attacks of more acute pain referred to the region of the appendix. The more acute attacks are as a rule coincident with a more pronounced, acute general disturbance of the gastrointestinal canal, often due to indiscretions in diet, and varying in degree of severity up to

a typical attack of acute appendicitis. Examination even during the intervals of relative quiescence reveals a point of localized tenderness over the site of the appendix and oftentimes the appendix may be plainly recognized upon palpation as a tender tube. To facilitate palpation of the appendix the patient, lying upon the back, is instructed to raise the right thigh with the leg extended at the knee. This puts the psoas muscle on the stretch, and using this as a guide or landmark the appendix can in many cases be felt to the outer side of the muscle and identified by the tenderness elicited when it is rolled under the examining finger.

The acute catarrhal condition is, in many instances, simply an exacerbation of a chronic appendicitis and often accompanies an attack of gastrointestinal disturbance following the ingestion of some unusual form of food that has disagreed with the patient. We have the history of gastric disturbance and pain in the abdomen, which gradually becomes localized in the region of the appendix. With the settling of the pain in the appendix the bowels as a rule become constipated. This is an important symptom and in marked contrast to the diarrhea which is so characteristic of the ordinary attack of cholera morbus. There is a moderate elevation of temperature, 100° to 101° , and moderate acceleration of the pulse rate, 90 to 100. The patient does not look especially sick and lies upon the back with the right thigh and knee flexed. Upon examination and pressure at McBurney's point tenderness is elicited. As a rule this tenderness is distinctly localized. Pressure upon any other part of the abdomen is not associated with pain except in some few cases and then the pain is referred to the region of the appendix. The right rectus muscle is found rigid and resists the effort to palpate the right iliac fossa. There is no tumor to be felt. The belly is usually not markedly distended. If these acute catarrhal cases are seen early and placed upon proper treatment, the symptoms often subside in a few days and the attack stops short of suppuration. Still, upon the other hand, in spite of prompt and proper treatment some of them go on to suppuration and abscess formation and perforation or to sudden gangrene; hence the necessity, in the absence of operation, of carefully watching them for any sign of danger.

In the second group of cases, the abscess cases, we have the history of the attack beginning as described in the preceding para-

graphs and lasting several days with the symptoms that have already been mentioned in the first set of cases, but the symptoms do not subside, they persist. The temperature goes higher and the pulse becomes more accelerated, although in occasional cases the temperature and pulse rate vary but slightly or not at all from the normal, and the constipation continues. Finally, after several days, upon palpation of the abdomen a tender tumor, occupying the iliac fossa, may be made out, indicating that an abscess has been formed. It will be noted that other parts of the abdomen remain fairly free from tenderness. In some of these cases the general symptoms that mark the early period of the disease and precede the formation of the abscess are so mild as to be overlooked or only brought out by careful investigation by the examining physician.

The adhesions that enclose the abscess may break down and as a result of leakage we may get a general peritoneal infection, or new localized abscesses may form, each succeeding one connecting with the other—progressive peritonitis. These accidents give their own characteristic symptoms.

The third variety, the fulminating form, is the real deadly variety of appendicitis, and deadly because of the suddenness of its onset and meager symptoms and of its destructive character and the virulence of the infection. Many of the cases are unrecognized until too late for successful surgical treatment.

These patients may give a history of previous attacks or they may have been complaining of indefinite abdominal symptoms for several days, or they may be attacked without any warning whatever—may be suddenly awakened in the night with intense pain in the abdomen. The pain at first may not be referred to the region of the appendix but it does gradually become localized there.

Examination fails to reveal the presence of a tumor in the iliac fossa. The muscles of the abdomen are held rigid and pressure over the appendix elicits marked tenderness. The abdomen is distended. These patients have an anxious, sick look which is characteristic. Temperature is irregular, usually not elevated at first. Pulse is accelerated, and later, as the disease progresses, out of proportion to the temperature. As the disease progresses the rapidity of the pulse is a good indication of the degree of sepsis, peritoneal absorption, but is not infallible. We may have acute gangrene of the appendix with but little or no acceleration of the

pulse, or even with diminished frequency of the pulse rate. In fact a low temperature and slow pulse, with distinct local signs of appendicitis, are characteristic of this form of appendicitis. The tongue is dry and coated. There are nausea, retching and vomiting. Constipation is marked and there may not even be gas expelled. This symptom of obstinate constipation is indicative of this variety of appendicitis; it is reflex in its origin and represents nature's effort to hold the bowel in a condition of rest so as to facilitate the formation of adhesions. As the degree of sepsis increases the pulse becomes more and more rapid and weak and finally a characteristic picture of acute septic peritonitis with the corresponding high temperature, rapid, weak pulse, delirium, dry, coated tongue, obstinate constipation and distention, etc., presents itself. In some of these cases we have a rather more asthenic type with rapid, weak pulse, cold, clammy skin, normal or subnormal temperature. Respiration is increased in frequency and thoracic in character, and may be out of proportion to the temperature and pulse rate. These cases of acute gangrenous appendicitis may, at the outset, on account of the sudden onset and lack of symptoms of previous illness, readily be confounded with cases of perforation of the stomach, duodenum or gall bladder, or with ruptured pus tubes. A point which is of much value in differentiating these cases from those of perforation of stomach, intestine, etc., is the marked local tenderness over the region of the appendix. Later, after peritonitis has become well marked, and with the abdomen tense and swollen, it may be more difficult to locate the trouble in the appendix and to differentiate them from cases of perforation of stomach, intestine, etc. In case of doubt an exploratory incision should be made in the linea alba and search made for the seat of the trouble.

TREATMENT.—Only in the first set of cases, the catarrhal, can there be any question as to the method of treatment—whether to operate as soon as the diagnosis of appendicitis is made or to wait with the hope of the attack subsiding, or to avail oneself of the advantage of an interval operation. If sure of the character of the lesion we may temporize in this set of cases; it will do no harm watching the patient carefully for any sign of danger. Many of them resolve without going on to suppuration or gangrene and therefore escape operation during the acute attack. Some of them, with strict attention to diet, bowels, etc., never have another at-

tack; still this is the exception to the rule. Nature may be assisted in her effort to effect a spontaneous cure in these cases by enjoining complete rest, withholding all food, and permitting only water to be taken, and by the administration of small repeated doses of calomel and bicarbonate of sodium. An icebag may be applied over the region of the appendix. If there is any doubt as to the exact pathological condition existing operation should be advised, except when the presence of some organic disease of the heart, lungs, kidneys, etc., would make an operation extra hazardous. Under these circumstances one might wait with operation until the indications became more imperative. If the patient recovers without operation from the acute attack operation should be urged for the purpose of removing the appendix, unless some distinct contraindication, as mentioned above, is present. Appendectomy in these simple catarrhal cases and in experienced hands is practically without danger, either immediate or remote, and gives the patient the only certain assurance against subsequent attacks, which are so apt to occur. Sure enough there may never be another attack, but the reverse is the more likely because after one or more acute attacks the appendix is left in a damaged condition that makes it susceptible to renewed attacks. The possibility of being out of the reach of proper surgical help in a subsequent attack is a potent argument in favor of an interval operation. In these cases of simple catarrhal and so-called interval cases amputation of the appendix and inversion of the stump through a gridiron incision in the abdomen is the most satisfactory method of operating. No drainage is necessary, and the abdominal incision is closed layer by layer with catgut.

As to the second group of cases there should be no question concerning the proper method of treatment. Operation should be undertaken as soon as the abscess is diagnosed—abscess means adhesions, and adhesions mean good prognosis. Through an incision corresponding to the location of the tumor, by preference carried between the fibres of the rectus, the abscess is evacuated and the cavity cleansed out with saline poured from a pitcher, followed by peroxide of hydrogen, and this in turn washed away with the saline, and the appendix then sought for and removed. It is desirable to remove the appendix in all these abscess cases. A careful search should be made at the time of operation for a concretion that

may have escaped from a perforated appendix into the abscess cavity. Such a concretion is often flushed out with the escaping pus when the abscess is opened or with the saline when the abscess cavity is being flushed out. If a concretion is overlooked and left remaining in the abscess cavity it may keep the wound open for a long time and make the healing process tedious, or it may necessitate reopening the wound to search for and remove the concretion. In most cases after the appendix has been separated it can be amputated close to the root and the stump turned in and the opening corresponding to the turned-in stump closed with a purse string. In some cases the cecum is so tightly fixed within the abdomen by an unusually short mesocecum that it is almost impossible to draw the cecum sufficiently far out of the abdominal incision to permit of properly applying the purse-string suture about the root of the appendix for the purpose of inverting the stump, and in these cases one may have to be satisfied with applying a ligature of catgut around the root of the appendix and after amputating the organ touching the end of the stump with a drop of carbolic acid on a probe.

These abscess cases should all be drained for forty-eight hours or longer with a cigarette drain. In some cases where the abscess reaches upward behind the colon toward the kidney it is wise to provide counter-drainage through an additional incision in the loin just above the crest of the ilium—this counter-drainage will not often be found necessary. The incision in the abdomen is closed, except for that part where the drain emerges, layer by layer, with chromic catgut reinforced by several interrupted through-and-through heavy silk sutures.

THE QUESTION OF CLOSING THE INCISION IN THESE CASES WITHOUT DRAINAGE.—This may be done in those cases where it is possible to evacuate the abscess and cleanse the cavity thoroughly and invert the stump of the appendix. Some of these will show primary union, still others will break down and on account of there being no ready-formed vent for the pus it undermines the skin and does much more damage than if a drain had been left.

In a series of thirty-five cases treated by the writer without drainage about one-half of them broke down within a few days and had to be opened and drained. In these cases the pus was invariably found between the layers of the abdominal wall—usually in

the fatty layer underneath the skin. The peritoneum seemed to be well able to dispose of any infectious elements left behind, but not so the layers that make up the abdominal wall. The discharge of pus when the abscess is opened and the delivery of the diseased appendix through the incision in the abdomen necessarily infect the edges of the incision, and although in some few cases we could get along without drainage still the drainage does no harm and if proved to be not necessary it can be removed after forty-eight hours and really does not delay healing very much if at all.

THE THIRD GROUP OF CASES.—It is of the greatest importance to recognize these cases early and to operate without delay. They are usually first seen by the physician and the responsibility is his to promptly make the diagnosis, to promptly recognize the dangerous nature of the lesion. Early operation will save a very considerable number of these patients who would otherwise be certainly lost. There are no limiting adhesions and delay is fatal. The deadly results are due to failure to recognize these cases—to distinguish them from the ordinary less dangerous varieties. They should be operated upon before the system is overwhelmed by absorption of the septic material. If seen late, after the patient has become thoroughly septic—the system thoroughly saturated with the poison—and the heart has begun to fail, operation will be of no avail. It is simply a question of the degree of poisoning at the time of operation and the individual patient's power of resistance. When the heart is still strong and not rapid the prognosis is good—means either a small degree of absorption or a high degree of resistance. After the poisoning has become more intense and the heart begins to show the effect of the poison by increased frequency and diminished strength of its beat, the prognosis is less favorable. With a pulse rate of over 130 the prognosis is poor, with a still more rapid heart, 140–150, meaning a still greater degree of poisoning—lack of resistance on the part of the patient—the prognosis is bad. It is almost without hope to operate when the heart action indicates that the patient is overwhelmingly poisoned because even after the surgeon has eliminated the source of the infection the system—kidneys, etc., is unable to throw off the poison which has already been absorbed, and the heart rapidly succumbs to the effect of the deadly toxins. However, even in these desperate cases operation should be resorted to as the only

measure offering hope. A good free incision is made and the appendix sought and removed. If operating early and the abdomen is free from serum and pus, and we have succeeded in inverting the stump of the appendix, the incision in the abdomen may be closed up without drainage. The peritoneum will itself dispose of septic products if not in too great quantity and if the source of supply is cut off. Even in these cases, however, there can be no harm in leaving a cigarette drain in the end of the incision, reaching down to the site of the turned-in appendix, for forty-eight hours. If operating later and a considerable amount of sero-pus is found in the peritoneal cavity, this should be removed thoroughly by dry sponging and flushing of the immediate neighborhood of the appendix with saline, followed by peroxide, and this, in turn, by saline. The abdomen should be wiped dry and a cigarette drain introduced which reaches down to the former site of the appendix. The purpose of the drain is not to drain the peritoneal cavity, because that is impossible, but just to drain the immediate site of the appendix and the incision. This drain is removed at the end of forty-eight hours and if it does no good it surely does no harm. Elaborate flushing out of the entire abdominal cavity is not, as a rule, necessary in these cases—it is not a limited quantity of septic material which might remain in the peritoneal cavity after operation, but that which is in the lymphatics and blood-vessels and which has already been absorbed before operation is undertaken, that renders the patient's condition desperate. The blood-letting during the operation and the intravenous infusion of saline solution to replace the poison-charged blood are measures that benefit materially in these cases.

PRESIDENT'S ADDRESS.*

By A. Haines Lippincott, M. D.

When one is selected by his fellow-members of this Society to occupy the office of President, he at first feels a sense of pride and gratification for the signal honors bestowed upon him.

After the first flush of exaltation has subsided, and he looks into the future, and thinks of his responsibilities for the coming year—of the terrible parliamentary questions he is expected to decide, with the wisdom of a Reed or Cannon; of the essayists he must choose, of their medical opinions,

*Delivered before the Camden County Medical Society.

for which he must to a certain extent be responsible; of the many other duties and burdens which he must necessarily take upon himself—he cannot help having something of the feeling of the typhoid patient about to take his first ice plunge.

As the year rolls along, he begins to feel,—“Well, I have squirmed out of and dodged the issues pretty well,”—and—“I hope I have not made many enemies,” and again, he begins to expand his chest and feel fairly satisfied with the Society, its members and himself. When, like a flash from the heavens, he is brought up on his heels, with his body bathed in cold perspiration as he thinks of the very last meeting, at which he may spoil all his year's work with an address.

However, it is not my fault and had I a hand in framing the Society's constitution for this year, the President's address would be omitted.

I wish to thank you members for the honor you conferred upon me. I hope every one has been satisfied with my stewardship. I have endeavored to have subjects presented for discussion of a wide range in the medical and surgical domain, and hope every member has been benefited by the year's work.

I believe our profession at large is in a much healthier condition than it was a few years ago. There exists a better feeling among the members toward one another. We have learned to know each other better, and that knowledge has taught us our own shortcomings; we now grasp each other's hand with a feeling of true friendship and brotherly love. We all unite in a common study of medicine and surgery, that is bound to benefit the public at large, and ourselves as well. Possibly a great amount of the credit for this is due to the Councilors of the American Medical Association in stimulating the County Societies to a reorganization, and persuading all of the members of the profession to join, thereby, becoming better acquainted with each other.

The meetings of the Society are better attended than in the past, which to my mind, shows a deeper interest in each other and the profession we have adopted for our life work.

One is apt to look with suspicion upon a doctor that does not join his local Societies, or does not attend them if he is a member, as it is his duty to give to the Societies the benefit of his professional experiences and observations.

The profession is overcrowded and the struggle for the necessities, not to say anything of the luxuries of life, is severe; our fees and our percentage of collections are too small. It almost makes one feel like recommending an organization something on the lines of a labor organization for our protection. But that is impossible, as we cannot inject into our work any spirit of commercialism. We have always been ready to respond to the call of the poor and suffering and will always do so.

One of the questions vital to our profession is now being discussed and acted upon in Medical Societies all over the country. A question we also must face before long; one upon which we must take a decided stand, no matter whom it touches. It is a question that does not effect the poor and needy, but it deals with the workingman to his financial gain, but our great loss, and that is the lodge doctor.

It is a grave question for us, but I believe must be handled with firmness, even to the loss to the Societies, if need be, of the affiliation of doctors engaged in such work. Then, there is the drug store doctor, with the fee for the medicine and the doctor's advice thrown in. I know of what I speak, for I once (to my sorrow) was "also doctor and druggist, too." To me it seems better for the physician to furnish his own medicine for his office work at least, charging a good fee for his advice and giving the medicine. It would be of much more benefit to the patient, for then he would get more advice and less medicine, than with the drug store practice, where he gets a small amount of advice and a large amount of medicine.

Another evil affecting our profession is the quack doctor, and the sale of nostrums. The articles published in the *Ladies' Home Journal* and *Collier's Weekly* exposing some of these frauds have done something to bring them into publicity. But in spite of these exposures, the columns of our dailies are full of their advertisements; and as I write this, I pick up my local paper and learn that Mrs. "Smith" under the skilful treatment of Doctor "Brown" is recovering from a very severe case of pneumonia; that one bottle of "American Kidney Cure" will relieve the worst case of *Bright's disease*! A whole page is given to a lecture on Christian Science with all that implies; and a few months ago, a reputable physician of this State was the star witness in a prosecution against a healer of the Christian Science Church, and another reputable physi-

cian of this State was a witness for the defense. Can you blame the public if their ideas are a little hazy? I believe our profession should take a greater interest and some part in our national, State and municipal affairs. In all sanitary questions where a medical mind has been in the councils, it has proven its worth and benefit.

Well do I remember the meetings, and special meetings, held in this building when the question of a new water supply for Camden was being discussed by Councils. With the earnest recommendation of our profession the artesian well system was installed, thus practically eliminating from our city typhoid fever, much to the financial loss of the physicians of this community. This of itself, should prove to the public that we have their best interests at heart.

The field of surgery is an attractive one, but there is not enough surgery to go around. If the young graduate would devote his time to the study of internal medicine, and forget his surgical ambitions, it would be better for the public.

The enthusiasm of the untrained surgeon who is successful in an uncomplicated case of appendectomy is very amusing. But I would feel more like congratulating the patient on his or her escape. God help the next case as the same man plunges into a mass of pus and adhesions. Abdominal surgery should only be done by trained men and trained assistants.

Internal medicine is sadly neglected. Osler has well said, "In the fight against ignorance and quackery, diagnosis, not drugging, is our chief weapon of offense." The undergraduate is taught principles based upon scientific facts—this is all the college can do for him; as to whether he is a good physician, depends upon the man himself.

The profession seems to be awakening to the responsibilities that it has been slumbering through for years. It is to a certain extent our fault there are so many isms and pathys. Was not Hahnemann a wise old man, when he saw the terrible doses that were forced into the irritated stomach of the sick of the world? He taught us a lesson to reduce our doses and his followers soon learned that they had to depart from his teachings and give larger doses. We are now sailing along in the happy medium, and if our brothers would only drop that word Homeopath they cling to for some reason, which they may explain, we could be one big family of Doctors of Medicine.

Do you suppose if we had advised manip-

ulation, massage, heat and diet to our patients with old stiff joints and muscles, instead of saturating them with salicylates and iodides, there would have been such a question as osteopathy?

If we had posted ourselves on electricity and a little suggestive therapeutics, and applied some galvanism to our nervous cases, there would be electric doctors trying to cure every disease known, at so much per try? If we had eliminated a great deal of rich foods, and insisted upon our patients drinking more pure water and taking more exercise, the health springs would be doing such a flourishing business? If we would insist upon a little more rest, sunshine and fresh air injected into the lives of some of our patients, there would be pilgrimages of sun worshipers, and people walking out in the morning dews barefooted? If we had used some common sense, some discipline and firmness, would not Muldoon still be training prize fighters, instead of directing the lives for a few weeks every year of some of our nation's leaders? If we would treat the hyperesthetic urethra, seminal vesicles and prostate of our sexual neuresthenics, the Hobensacks and Theils would be in some other business. If we would insist upon an examination of all rectal cases that consult us, instead of accepting the patient's diagnosis, they would be smearing pile ointment on fistulas?

All of this is true, and yet I think that about one person in ten is a crank, and no matter what medical or political question is occupying the public's mind, he is against it, eager to embrace some fad. It is this class that would rather pay one dollar a bottle for Peruna, when he could get a much better whiskey at half price.

Our real usefulness to the public depends upon ourselves. We should practice intelligent observation, close application, perusal of at least three of the standard journals, attendance on our medical meetings; honest and ethical relations with our fellow medical men, then, perhaps, our family may receive from the Medical Society a set of resolutions, and if our estate will afford it, our widows so disposed, our picture may adorn these walls after our exit.

We have received from Prof. A. P. Heineck, of Chicago, a paper on The Surgical Treatment of Exophthalmic Goitre, and a Report on the Medical Administration of the Hospitals of New York City. These will appear in the next issue of our JOURNAL.—EDITOR.

ABSTRACTS—PAPERS AND ADDRESSES.

CONTRIBUTION TO THE TREATMENT OF SPONDYLITIS TUBERCULOSA.

Alex. C. Wiener, M. D., Chicago.

Professor of Surgery, Illinois Postgraduate Medical School; Attending Surgeon West Side Hospital.

The following case was instrumental in originating a new method for successful treatment of tuberculous spondylitis involving the second, third and fourth dorsal vertebræ with pronounced deformity.

History.—Mrs. A. E., married, fifty-four years of age, had two children who were stillborn at full term, owing to the mother's very contracted pelvis. Had never had any venereal disease nor typhoid fever. Fifteen years ago she suffered a thrust in the back from the pole of a wagon. Within one year her back became gradually deformed. At the same time she was seized with attacks of asthma and rheumatic pains radiating from the back toward the neck and head. Three years of suffering gone by, she was supplied with a Taylor brace. After one year she was practically free from pain, and she enjoyed good health until in 1903 she passed through an attack of influenza. Since that time she was troubled with pains of a neuralgic nature, which emanated from the upper part of the back and ran down and up the spine into the shoulders and the neck. When first seen she described these pains as sharp and cutting, coming on suddenly, like lightning, which lasted a few minutes at the time. In April, 1906, I saw her in consultation with Dr. Peter Latz, in whose diagnosis of tuberculous spondylitis I concurred. The patient was in bed and could not move about without assistance. In December, 1906, I saw her again.

Status Præsens.—Short, stout woman, with an expression of great suffering and anxiety in her face. Pulse about 90, weak and irregular; temperature 100° (F.) in the forenoon. Length of body, 4 feet 10 inches; circumference of chest, 35 inches; of abdomen, 37 inches. Heart sounds normal; no arteriosclerosis. Stomach pendulous. Lungs apparently normal. Loud bronchial râles over both lungs. Deep and superficial lymph glands of the neck, palpable. Pott's deformity, as above stated. Liver enlarged, lower edge reaching down to below the umbilicus. Right kidney also palpable. Colon distended, ascending colon packed with feces. Gases felt rolling beneath palpating hand. Lower edge of ribs almost touches the crest of ilium. Both feet and legs edematous. Feet in spastic equinus position. Clonic contractions of both feet and legs every once in a while, which lasted a few minutes and caused agony.

The outlook for the recovery of this sufferer certainly was gloomy. Authority to follow there was none. Any extension brace which has its abutment at the crest of the iliac bones would have been of no benefit. The fastening of a jury-mast by a plaster-of-Paris cast was also not to be considered, owing to the figure and internal derangements of the patient. Here I may be permitted to emphasize the great attention to be paid to the mental attitude of this class of patients. The majority are intellectual, highly sensitive, self-conscious, and very suspicious individuals. Any contrivance which renders their affliction as con-

spicuous as a jurymast does is abhorred from the start. I have, therefore, dispensed with this medieval apparatus long since. The jurymast deserves to be banished into the museum of obsolete surgical instruments. I trust that adoption of my trolley extension will cut off the last fathom of the jurymast's existence.

The indications in this case were clear enough. First, the spastic reflex contraction of the muscles of the neck had to be permanently counteracted. This would have served two objects: (a) in relieving the pain; (b) in assuring better arterial and lymphatic circulation. Thus the local pachymeningitis as well as the edema of the cord, which are the forerunners of transverse myelitis, are effectually relieved. Second, the affection of the bronchi, of the liver, and the patient's generally debilitated condition made physical exercise imperative. Third, the despondency over her helplessness and pains was daily growing, and something had to be done at once to occupy her mind and to inspire her with new hope.

There was no departure from principles generally accepted in my plan of treatment. Weight extension applied at the head is the only means of meeting all demands. But instead of making the pulley stationary, I mounted it on a trolley wire, so as to enable the patient to exercise while the weight was doing its work. Copper wire proved to be too elastic. So a steel wire was stretched through two rooms. On this ran two pulleys, twenty inches apart, which were connected by steel bars. In the same cases in which the upper pulleys were running, pulleys of the same circumference were fastened. Over this ran the rope on which the weight for the extension was suspended. This arrangement protects the patient from being hit by the swinging weight. The patient, in moving forward, moves the weight along, and the spine is permanently stretched, whether he moves about or sits down.

In this case, the legs being paralyzed, the patient, at first, had to be supported on both sides. The legs lagging behind were moved forward by the legs of the attendants. The result was astonishing. In two weeks the patient could take long steps herself without assistance. In three months she was able to walk on two canes, free from the trolley, and she is, since June, six months after the commencement of the treatment, able to enjoy outdoor life. Her general health has gained accordingly; the cough has ceased; the liver is decidedly smaller, yet she is still very excitable and nervous. She was not able to stand the strain of being presented to the Chicago Medical Society.

The trolley extension is not to be compared with other remedies where so often the truism is in order, *post hoc, ergo propter hoc*, or one swallow does not make the summer. From the nature of the affliction and the almost immediate relief that was found with the employment of the trolley extension, it is evident that similar cases must yield to the same treatment. In cases of fracture of the spine the trolley extension must be of value too, and ought to be employed wherever danger of transverse myelitis and decubitus exists.

Weir Mitchell and Motschukowsky, the eminent Russian neurologist, recommend weight extension in locomotor ataxia. Not every patient afflicted with tabes can afford to employ the Fraenkel method of exercise for recovery of coördination. Neither much time nor money is required to exercise with the weight extension, which

ought to be regulated by the demands of the patient, ranging between five to twelve pounds. In this instance a great number of observations will have to be made in order to prove the value of the method as an adjunct in the treatment of locomotor ataxia.

* * * * *

Dr. Liston H. Montgomery: I would like to ask Dr. Wiener what, if any, constitutional treatment he gives in these cases?

Dr. Wiener: I did not use tuberculin injections. An effort was made, however, to keep the bowels of the patient open by enema and suitable cathartics.

As to the difference between children and adults, the superior recuperative power of children versus adults is no more graphically illustrated than in tuberculosis of the bones. We know that children, as Dr. Ryerson has pointed out, will recover the use of their limbs after complete paralysis within two years. This can be shown in 83 per cent. of the cases, and what is going on is well demonstrated in many cases. The paralysis is not produced by pressure of the bones on the spinal cord, but the result of pachymeningitis, myelitis, and an edema within the substance of the spinal cord. Sometimes in these cases iodid of potash is an admirable remedy, but the best and most immediate relief comes from extension. This extension, however, is not to be applied in such a way that the child cannot breathe. It must have a chance to take in plenty of oxygen, and, furthermore, the child should enjoy an outdoor life, irrespectively of the season of the year.

Tuberculosis of any kind is intrinsically a non-hospital disease. These patients should be taken out of the hospital as quick as possible.

Weir Mitchell and Motschukowsky, the famous Russian neurologist, have advocated, in tabes dorsalis, permanent weight extension in a chair, particularly in cases where the ataxis is pronounced. I would be pleased to hear from any neurologist who has employed in hospital cases this apparatus as an experiment. It can be procured at but a small outlay.—*Illinois Medical Journal* (February, 1908).

TREATMENT OF DIABETES INSIPIDUS.

By JAMES BURKE, M. D., Manitowoc, Wis.

Diabetes insipidus is a condition of metabolism of the tissues resulting in the synthesis in the blood and tissues of a poisonous substance derived from incomplete nerve waste, whose affinity for nerve structure attacks the visceral ganglionic system of nerves with a secondary impairment of the chemical composition of the small ganglionic relay forces in the kidney; thus from abnormal innervation and the improper quality and quantity of the blood supply to the kidneys the normal chemical composition of the cellular protoplasm and enzymes of the kidney structure suffer while the toxin is present in the blood and fluids; and the normal chemism between the secreting entities of the kidney and the products in the blood normally secreted by the kidneys is temporarily destroyed.

It must not be overlooked, in treatment, that substances normally excreted by the kidneys, in solution in the blood and fluids, are yet incomplete, and that their rounding out by the administration of a cognate affirmative poison from the vegetable kingdom would complete the metamorphosis to a benevolent excretory product.

The paresis of the vasoconstrictor nerves, by the presence in the blood of a toxin, affinitive for nerve structures, seeking to obtain one or more affinitive molecules from disintegration of secretory nerve structures of the kidney, to satisfy the chemism of the toxin in its role of becoming an excretory product, seriously affects the normal presence and distribution of blood through the kidney substance, adding another factor to the impairment of the kidneys as secreting organs.

The lack of normal excretion of the urinary solids causes a temporary increase of the solids of the blood and fluids, with a resulting abnormal thirst for water, and seems to add to the difficulty. The increased intake of fluids is but an effort of nature to dilute the incomplete proteid waste and, also, the solids left in the blood volume by incomplete kidney function.

Rational treatment in the condition of diabetes insipidus is the neutralization of the existing proteid toxins in the blood—the more diluted the better—by giving a cognate, affinitive substance from the vegetable kingdom which, by chemical union, makes both the toxin and the vegetable proteid poison, one benevolent excretory entity. When thus properly presented to the kidneys the normal excretory product is the only stimulus to normal kidney action. Ordinary diuretics have been found useless in this condition—as for instance, acetate of potassium, which merely adds to the solid constituents of the blood, and but demands more water to dilute the blood.

After freeing the volume of the blood and fluids, the delicate protoplasmic and nervous abnormality must receive attention by the indicated use of aconitine, atropine or arbutin. Aconitine is indicated when there is fever; a rapid, wiry pulse, with an ashen color of the skin. Aconitine is clinically proved to be a neutralizer of incomplete nerve waste poisons disturbing metabolism. The rounded-out toxins become normal entities for excretion through the kidneys and skin.

From present knowledge arbutin is the best neutralizer of kidney toxins we possess; it is not chemically aggressive against the tissues of the kidney nor any other tissue. The surplus is conveniently available in neutralizing cognate affinitive toxins in the cells of the various special functioning areas of the kidneys, in the pelvis of the kidneys, through the ureters to the bladder; even to neutralizing proteid, cognate toxins in solution in the urine. Arbutin is one vegetable alkaloid that is not responsible for toxic effects. During the illness digitalin and atropine are alternately useful in overcoming the anomalies of circulation in the kidney. Too great pressure of the blood to the kidneys can sometimes be alleviated by giving atropine to overcome a spastic condition of the arterioles of the general circulatory system, opening a larger avenue for the disappearance of the surplus blood from the congested area. Therapeutic doses of digitalin, by neutralizing a cognate toxin, causing a temporary paresis of the arterioles, braces up the circulatory impulse to a better pressure and distribution of the blood and fluids. Rounding out toxins is a practical stimulus to the several eliminative organs.

To relieve the body from the disturbing effects of toxic, urinary products, neutralize these toxins so as to make them normal urinary products; this, secondarily, permits the secreting kidney cells to resume normal functions.—*The Virginia Medical Semi-monthly*.

DUODENAL AND GASTRIC ULCERS.

Dr. Albert J. Ochsner, of Chicago, read this paper at the annual meeting of the New York State Medical Society. He said it was proper to consider these ulcers together, because the stomach and duodenum were so closely related anatomically, physiologically and pathologically, and embryologically both were formed from the fore gut. The stomach had five functions which should be borne in mind. 1. It stored the food taken at one meal. 2. It secreted digestive ferments which acted in an acid medium. 3. It acted as a mixing machine. 4. It ground the food into the proper consistency. 5. It acted as an absorbing surface. The duodenum served simply as an extension from the stomach, in which small portions of food were subjected to mixing, but in an alkaline medium. As regards the etiology of gastric ulcer, traumatism from within was the chief exciting cause. The vast majority of cases occurred in the pyloric end of the stomach. Another etiological factor was the theory that certain antibodies were present or absent under certain conditions which prevented the gastric juice from digesting the mucous membrane of the stomach. This seemed to be borne out by animal experimentation. Duodenal ulcer was due often to an extension of a gastric ulcer, the so-called "saddle-shaped" ulcer of the pylorus; it was also due to the irritating effect of the gastric juice, a form of what might be called peptic ulcer. Duodenal ulcer might be caused by severe burns of the skin and by thrombosis of the vessels supplying the duodenum. The frequency, relatively, of duodenal ulcer was greater than formerly supposed. He referred to the remarkable studies of Cannon. The stomach and duodenum were the machines for getting food into proper condition for use later on. The digestive apparatus should not be interfered with surgically needlessly, because in ulcer of the stomach or duodenum the patient's digestive apparatus often could be restored to the normal without surgical interference. In the early stages, dietetic, medicinal, hygienic, and other measures should be employed. He emphasized the importance of giving dietetic and hygienic instructions to patients to prevent recurrences after the ulcer had healed. There were many cases, however, in which a permanent cure was not possible, and the sooner surgical relief was employed the better. The complications to be considered in cases of persistent gastric ulcer were perforation, hemorrhage, emaciation, adhesions to surrounding structures, and the implantation of carcinoma. At the beginning of an attack it was not possible to differentiate the class of cases requiring operation from those which would heal spontaneously. To protect the ulcer, much mucus was secreted. Hydrochloric acid was also secreted in large amounts. There was also hypertrophy of the muscles of the stomach. All this tended to increase the irritation of the ulcer. These changes were likely to do more harm than good, although the physiological intent was to protect the patient. The ulcer might encroach upon blood vessels; it might perforate into adjoining organs; or carcinoma might be implanted. Most commonly there was an obstruction at the pyloric end, due to induration at the base of the ulcer. This obstruction might be overcome by hypertrophy of the muscle; if not relieved by this, this is followed by an exhaustion of the muscles and consequently gastric dilatation. He recalled such a case in which the lower end of the stomach rested in the pelvis. Because of the residual

food in the stomach the patient absorbed products of decomposition instead of the products of digestion. This accounted for the cachexia, which was invariably present in these cases. This explained the favorable results which followed gastric lavage. With efficient drainage by gastroenterostomy the patients were made much better. He emphasized the fact that the technique must be learned at the operation table. There was no operation in the field of surgery in which there were so many failures if the operation was learned on the cadaver or from a description as this particular operation. Certain fundamental principles must be observed to reduce the mortality. (1) The amount of traumatism must be reduced; (2) the intraabdominal organs should be exposed as little as possible to the cold air; (3) the patient must be placed in the sitting posture as soon as possible after the operation; (4) in case of closing perforations the sutures must be so placed as not to result later in obstruction from contraction; (5) in case neoplasms are to be enucleated, all the tissues closely connected by lymphatics must be removed; (6) in gastroenterostomy the lowest portion of the stomach must be chosen; (7) there must be no tension upon the sutures; (8) except in complete gastrectomy the coronary artery must be preserved; (9) in acute gastric dilatation the stomach tube must be at once introduced and gastric lavage employed; (10) the simplest possible technique must be employed preferably without use of mechanical apparatus; (11) these patients should be controlled for a long period of time after operation and instructed as to their diet and general hygiene.—*N. Y. Medical Record* (Feb. 8, 1908).

SUDDEN DEATH FOLLOWING USE OF DIPHTHERIA ANTITOXIN.

E. L. Boone, M. D., New Martinsville, W. Va.

After reading in *The Journal* (Jan. 11, 1908) an account of Dr. S. N. Wiley's unfortunate experience with antitoxin, I wish to report an experience almost identical with Dr. Wiley's:

Patient.—In the evening of Aug. 29, 1907, Mrs. W. brought her son Frank, aged 10, to my office, saying she was afraid his throat was sore. I examined him and found his condition as follows:

Examination.—Temperature 102, pulse 110, respiration 18. The throat was very red and much inflamed, but there was no diphtheritic membrane. There being a slight epidemic of diphtheria in the neighborhood, I did not make a positive diagnosis, but told the mother that it was a case that would bear watching and that I was afraid of diphtheria. I gave the boy 4 grains of calomel and a simple throat wash.

Course of Disease.—Next morning at 11 o'clock I was called to see the boy. The cathartic had acted, but temperature was still 102 and pulse 110; a small amount of diphtheritic membrane had made its appearance on the pharynx. I immediately made a positive diagnosis of diphtheria of a mild grade, which was confirmed at that time by another physician whom I called in as he was passing. The boy had been up all forenoon playing and was apparently very strong. He was an extremely well-developed little fellow, and had no organic heart trouble, nor did there seem to be any particular weakness of the heart. After cleansing the site of injection, with the consent of the parents and the endorsement of the other

physician, I gave 4,000 units of antitoxin, which was stamped "good until February, 1908." I introduced the needle carefully below the shoulder-blade, and slowly injected the entire amount into the back of the patient; he was lying on his face and did not even cry out when the needle was introduced. I had just turned away from him and laid the syringe on the table when he gave a loud cry of distress and sat up in the bed, catching at his throat with both hands, also giving a choking cough or two. I noticed a look of intense anxiety on his face with pallor around the lips. I asked his mother if she had heard him cough in that manner before and she said she had not. He cried out that his head hurt him and that he could not breathe. All this time he was clutching at his throat. I tried to get him to swallow some whiskey and water, but it seemed to choke him as though the muscles were paralyzed; in a few seconds his lips, face, ears and neck were cyanosed, the pupils were dilated and eyes staring; froth was also running from the mouth, and the boy occasionally gave a harsh brassy cough, together with a peculiar cry. He had a convulsion and ceased to breathe, although, as in Dr. Wiley's case, the heart continued to beat long after voluntary respiration had ceased. I gave him stimulants hypodermatically, and also used artificial respiration until life was extinct. The time of his death was not over five or six minutes from the time of giving the antitoxin.

I have used antitoxin of different makes a number of times and have always had excellent results, excepting in this case, and do not understand this experience. I am sure I do not want any more experiences of a like nature. I have all confidence in antitoxin and have used it since with uniform good results; but I should like to know the cause of death in this case.—*From Journal A. M. A.* (Feb. 8, 1908).

Nihilism and Drugs.—Dr. Abraham Jacobi, of New York, delivered an address on this subject at the annual meeting of the Medical Society of the State of New York, January 28, 1908, and in a very facetious manner, causing much laughter and applause. A physician should be judged, he said, by the extent of his knowledge and not so much by his cures. So long as medicine was an art, it would never become a science. So long as the physician was successful, he would not be scientific. So long ago as 1860 Oliver Wendell Holmes said that if one threw out opium and a few other specifics, and threw the rest of the agents making up the pharmacopeia into the sea, it would be better for the people, but bad for the fishes. More harm than good had been done by medication, was what Sir Astley Cooper said. After all it was not of the slightest interest whether one-half or three-quarters of the lungs was hepatized; what the people really wanted was something to make them better. The year 1907 was disquieting because of tidings from Dr. Osler; the telegraph had reported that he had said to his students in London: "Be skeptical of the pharmacopeia; he was the best doctor who knew the worthlessness of medicines; study the man and the woman." This message, or a similar one, was sent out over the world. He was the *enfant terrible*, was what the *Evening Post* of New York said of Dr. Osler. What Dr. Osler probably and really meant was, first, be critical and frank; second, he was the best doctor who knew the worth of medicines; and third, study

your fellow man and fellow women and learn how best you can serve them. Therapy meant service. Dr. Jacobi said he wished Dr. Osler had said that. We had been told that by combining medicines we might cloud observation; that that was what physicians had been doing so long, and that it was not right. It should be remembered, however, that they were treating disease and not men and women, and there were those who did not care to wait for the action of one drug given for the relief of one symptom to wear off before giving another for another symptom, when, by combining the two, the results wanted could be obtained in a shorter time than if they were administered separately. It was about as wise as restricting the physical treatment to one single method. Why prescribe one and proscribe the rest. Dr. Jacobi had much to say regarding the expectant treatment. In 1836 Dixon said that the tendency of all diseases was toward death. Dr. Jacobi said that the expectant treatment had been the cause of many deaths; that often death resulted when proper treatment might have saved the patients. Typhoid fever, for instance, if left to itself, might prove fatal, and so might whooping cough, and many other diseases. The expectant treatment often was a compound of ignorance and indolence; often it was malpractice in cases which might have been saved by proper treatment. The expectant treatment was simply a sin of omission which frequently arose to the dignity of a crime. His meaning was illustrated by the citation of interesting cases. Expectancy meant loss of time and opportunity. In regard to drugs and their doses, the latter were dependent upon many factors, such as age, sex, locality of application, the amount of blood circulating in the vessels, the presence or absence of sepsis, etc. He spoke of a child with enteritis, one year old, who would take from 1/30 to 1/40 grain of opium. He said he had never seen a case of opium poisoning occur in his practice in such cases, and he believed the dangers accompanying the use of opium in young children had been much overestimated. He said that one grain a day of atropine given an adult would cause dilated pupils, dry throat, etc., while a child of four years could take as much as one-half a grain in enuresis with no such effect. He then referred to many agents and drugs which were of great value; many had been used for a long time, such as the poppy, mercury, quinine, male fern, etc. Seroorganotherapy had not come up to expectations. It was interesting to know that most of the bad and the good medicines came to us from Germany. In 1897 a South Carolina colleague had employed methylene blue in inoperable cancer, and Dr. Jacobi said he wished to acknowledge this doctor's claim of priority. With regard to the drug therapy of tuberculosis, for nearly twenty years he had used guaiacol in at least five thousand cases and he did not believe that any institution should leave out this agent in the treatment of this disease.—*N. Y. Medical Record*.

Legislation Against Tobacco.—The State Assembly of Wisconsin has adopted a bill prohibiting the sale of tobacco in any form to persons under sixteen years of age. The bill also prohibits such minors from using tobacco. The Illinois House has passed a bill prohibiting the selling of cigarettes or cigarette papers in that State.

Reports from County Societies.

ATLANTIC COUNTY.

Theodore Senseman, M. D., Reporter.

The regular annual meeting of the Atlantic County Medical Society was held January 10th, at the Hotel Rudolf, Atlantic City. In accordance with the regular custom at annual meetings, the scientific portion of the program was omitted and after hearing and acting upon the reports of the various committees, the following officers were elected to serve for the ensuing year: President, Dr. Clyde M. Fish, Pleasantville; Vice-President, Dr. David R. Berner, Atlantic City; Secretary and Treasurer, Dr. Milton S. Ireland, Atlantic City; Reporter, Dr. Theodore Senseman, Atlantic City; Annual Delegates, Dr. Edward S. Sharpe, Atlantic City; Censor, Dr. W. Edgar Darnall, Atlantic City.

The retiring President, Dr. Elisha C. Chew, then read his address, as follows:

Fellow Members of the Atlantic County Medical Society:

It has been my good fortune to be your presiding officer for two successive years. By reason of your coöperation and assistance during this time the Society is to-day in excellent condition, and I believe is entering upon an era of greater excellence and more extended benefits to its members.

We have at present a membership of sixty-two. Seventeen new members have been added to the Society during the last two years. Death has robbed us of three members, Dr. Samuel Bickel, Dr. Jacob Reed and Dr. Fayerman. One member has removed from the county, Dr. Theophilus Madden. Some have dropped away from the Society but they can be reclaimed.

Before ceasing to be your President I would like to make a few recommendations for which I bespeak your most earnest consideration.

First. The continuation of frequent meetings, I would say monthly or semi-monthly, as you think best, excepting probably the months of July and August. Nine meetings were held during 1907 and I believe you will agree with me that they were fairly successful and were not too frequent. The plant that grew from the germ left here by Dr. MacCormack is susceptible of a higher cultivation than we have accorded it.

Second. The amalgamation of the two existing societies—the Academy of Medicine and the Atlantic County Medical Society. The Academy of Medicine was formed primarily so that we might have more frequent meetings than the four then in vogue in the County Society; transportation was more difficult then for the county members; it was very inconvenient for them to attend evening meetings and get home the same night (the County Society meetings were held in the day time). Electric trains have removed this inconvenience, and the county members can now attend as easily almost as the Atlantic City doctors. The existence of two bodies composed of the same members and with the same object weakens both, the necessity for a separate society has passed. By merging both, the County Society will be strengthened and no detriment will be done to any member of either.

Third. The securing of a permanent meeting place. This would give a solidity and permanence to the Society that would be beneficial. We would feel as though we had a medical home.

Fourth. The employment of "home talent" at our meetings, at every time possible. The thought and care necessary to prepare a paper, report a case, or make a demonstration is a powerful factor, for the improvement of the individual making it and makes us better doctors. I say this especially to the younger men.

With these recommendations and an earnest hope for the prosperity and progress of the Atlantic County Medical Society, and the expression of my sincere thanks for your help to me while I have been President, I relinquish the chair to my successor.

The Society adjourned to the café, where the annual banquet was enjoyed, during which the "Good of the Society" was the general topic of conversation.

CAMDEN COUNTY.

Henry H. Sherk, M. D., Reporter.

The February meeting of the Camden County Medical Society was held in the Dispensary building on Tuesday, February 11th. Owing to the sickness of the President, Dr. Bushey, Vice-President Dr. Paul Mcray occupied the chair. There was a large attendance.

After a short business session, at which the following gentlemen were elected members: Drs. Samuel B. English, Thomas B. Lee and Edward Parry, Drs. Lettie Allen Ward and Lee Griscom were proposed for membership. Dr. Frank Neal Robinson of Monrovia, Cal.; James H. Roth, of Alberquerque, N. M., and Dr. E. E. DeGroft, of Woodstown, N. J., were nominated for honorary membership. The Society then adjourned and resolved itself into a social session, where the members with their wives, daughters and sweethearts, held an informal reception.

The guests present at the gathering, in addition to the members and their wives, were Dr. David C. English, of New Brunswick, the honored editor of *THE JOURNAL*; Drs. George Tracy, of Beverly; W. P. Melcher, of Mt. Holly; Enoch Hollingshead, of Pemberton; Harry Stout, of Wenonah; George E. Reading and H. A. Wilson, of Woodbury.

Dr. David C. English opened the entertainment with one of his enthusiastic addresses and was heartily applauded. After the address the members, assisted by their wives and daughters, rendered a pleasing program, consisting of chorus singing, vocal and violin solos, and "at the piano."

At the close of the concert the guests adjourned to the banquet hall where the committee of arrangements had provided a menu consisting of the delicacies of the season, to which all did justice.

The opinion of all was that this meeting was the best as well as the most enjoyable of its kind ever given by the Society.

Camden, Feb. 13, 1908.

HUDSON COUNTY.

August Adrian Strasser, M. D., Reporter.

The regular meeting of the Hudson County Medical Society was held at Lincoln Hall, Jersey City, on February 4th, Dr. F. D. Gray presiding. On motion, because of other special business detailed below, the reports of interesting clinical cases were omitted. The committee appointed to look into the matter of a post-graduate course of study along the lines mapped out by the A. M. A. were not yet ready to report on the

matter and asked for an extension of time. The Secretary read a communication from the State Society's Secretary asking that the County Society take action and instruct their delegates to the State Society how to vote in the matter of the proposed malpractice defense. After a discussion the society instructed the delegates-to-be to oppose any favorable action on the part of the State Society in this matter. Inasmuch as this meeting was to be a joint meeting of the County Society and the Retail Druggists' Association, the members of that society were invited to participate in the meeting, and about forty druggists attended the meeting; this being an effort on their part and as earnest on ours to make propaganda to establish the former cordial relations between pharmacists and physicians. The pharmacists brought, exhibited and demonstrated a number of pharmacopœal products made at various drug stores to be compared with the nostrums, which were at present in use. Mr. Cole in a very facile speech traced the history of the pharmacopœa and pleaded earnestly for the return by the physician to the use of pharmaceutical products as made by careful druggists and challenged comparison of the home-made with the foreign articles. Dr. J. Mooney then read the paper of the evening on "Abdominal Hernia and Its Treatment." Dr. Fraison opened the discussion pointing out the necessity of high ligation in femoral hernia, relying on this rather than on suture of the facial ring. For small inguinal hernias he argued for the advantage of the Kocher method in place of the usual Bassini, which, however, still remained the operation par excellence for layer hernias. Dr. Rector condemned the use of trusses as applied to most hernias and explained their actual harm instead of benefit.

For the druggists Mr. Gallagher explained the exhibits and presented to each physician present a copy of the "Physicians' Manual of the Pharmacopœa and Formulary," as published by the A. M. A. Dr. Kuehuc, formerly a pharmacist, made a few apt remarks on the former prevalence on the part of druggists of counter prescribing; on the part of physicians of dispensing, and on the part of both the giving and taking of percentages; much in the same strain was said by Dr. Sulouff. Dr. McLoughlin remarked that, although heartily in favor of the movement, and although he had always endeavored to follow the pharmacopœal recommendations, his own daughter had voiced the criticisms of the laity on many of these preparations when he had attempted to give her a galenical cathartic, by promptly asking why she could not have "Castoria as before; it tasted better."

The following new members were elected to the society: Drs. E. H. Salmond, Sprague, Robert White, L. A. Cosgrove and M. S. Bauelli, all of Jersey City; Dr. Decker, formerly from Morris County, had asked for a transfer from that county society to Hudson, but had received and could present nothing but his receipt for dues paid. He was asked to have the matter straightened out before being admitted to full membership.

The society then adjourned and the guests and members fraternized over a sumptuous collation.

In the performance of high tracheotomy a great deal of room can be gained by dividing transversely the fascia that extends upward from the thyroid.—*American Journal of Surgery*.

THE COUNTY MEDICAL SOCIETY.

Editorial in the *Journal of the Camden County Medical Society*, February, 1908.

It has ever been the opprobrium of the medical profession that its members are prone to jealousies and uncharitableness toward each other, any many are the unseemly stories and jokes that this condition of affairs has given birth to and fostered. Much stress is laid upon the statement that in the other professions, as the law and ministry, this does not obtain; and this assertion is accepted as true by the public without pausing to consider that the frailties of human nature enter into the business affairs and ambitions of those professions as it does into ours; and that the contests and rivalries for place, preferment or money are just as keen, and, in event of failure, are just as disappointing as they would be in the case of any physician.

That the medical profession has been compelled to bear the chief odium in this respect is not strange, when we consider how largely it outnumbered the various other professions, and how intimate is its relationship with the community at large. A large percentage of every community does not attend the churches, and a larger percentage does not have recourse to law; but, practically, every one has, at some time or other, need of a physician. It is thus that the unkind word or criticism has a much larger audience than obtains with any other calling, and in the course of time has given rise to the fiction that only in the medical profession does uncharitableness prevail.

Unhappily many physicians are unkind to their brethren, and perhaps there will always be some who are; but it is the consensus of opinion of the profession of the entire country that in recent years a marked improvement has been observed in this respect.

Many forces are at work bringing about this changed relationship, but none has been so potent as the various medical societies, and particularly the County Society, which brings together the doctors from various localities, and permits acquaintanceship between those who otherwise would never meet or know each other. It is surprising how the preconceived opinions that are formed, frequently unkind or antagonistic, disappear upon closer observation; traits that were unknown are discovered, unsuspected mental capabilities are revealed, a lovable character is unfolded, and the previously unknown now commands the respect and esteem that must be given to one who is recognized as honest, brave and true.

It is a matter of great regret that in every county there are some who do not realize the loss they sustain by reason of non-membership or non-attendance upon the County Society—a loss that cannot be expressed in terms of commercial exchange—but loss in the good will and good fellowship that is there given and received; loss of the opportunity to learn from their colleagues, and loss of the privilege to instruct others.

But, there is a commercial side to the question of membership. Various positions of profit that only a physician can occupy are withheld from the non-member of a medical society. The impression prevails, and correctly so, that the member of the County Society exerts a greater influence in his community, is better informed upon the medical questions of the day, and is the more

safe and expert counselor, no matter in what capacity his assistance may be sought. It is impossible for a physician to mingle frequently with his associates in the profession without receiving benefit in all the essentials that are considered requisite for the successful practice of his calling; and, in depriving himself of the privileges and opportunities that are thus placed at his disposal, is doing himself a greater injury and injustice than will ever be visited upon him by a colleague.

INTERNATIONAL CONGRESS FOR THE PROTECTION OF INFANT LIFE.

The second International Congress for the Protection of Infant Life, held in Brussels, Belgium, September 12th to 16th, 1907, under the patronage of their Royal Highnesses Prince and Princess Albert, was a notable and representative gathering. The meetings, which were held in the Palace of the Academies, were attended by over 600 delegates from almost every civilized country in the world, including many official representatives of the governments of these countries. Of this number about forty were English speaking. The scope of the Brussels Congress embraced the whole question of the prevention of infant mortality. Valuable papers were read, submitting statistics of infant mortality in fourteen countries. The discussions covered methods of gathering uniform international statistics of infant mortality, the subject of infant nutrition, the control of milk supply and the popularizing of infant hygiene. The most important outcome of the Congress is the formation of the International Union for the Protection of Infant Life. The organization is to be controlled by a permanent bureau, which will organize future congresses and carry on the work thus inaugurated. The officers of the Union, constituting the Bureau, have just been announced: President, Prof. Theodore Escherich, of Vienna; Secretary-General, Dr. Eugene Lust, of Brussels. Among the fifty members of this Bureau are three American physicians: Dr. Henry L. Coit, of Newark, N. J., as a Vice-President; Dr. L. C. Ager, of Brooklyn, and Dr. George W. Goler, of Rochester, as Councilors. The next Congress will convene in Berlin in 1910.

MEDICAL SCHOOLS AND THE U. S. PHARMACOPOEIA.

To the Editor of the *Medical Society of N. J.*

Dear Sir:—As you know, the United States Pharmacopœia (8th Rev.) was made the standard for drugs and medicines by the passage of the National Food and Drugs Act, June 30, 1906. Since then the manufacturing chemists, pharmacists and wholesale and retail druggists have been endeavoring to comply with the law. The fact remains, however, that many members of the medical profession are not actively supporting the movement throughout the country for the more extended use of the United States Pharmacopœia and National Formulary preparations. It was believed that the professors and instructors, in the medical schools throughout the country, could very materially aid in the movement by giving to their students *special lectures* on Pharmacopœial and National Formulary preparations, illustrating them by showing actual specimens and requiring them to study their physical and medical properties.

Will you kindly find space in your valuable journal for the following resolution, which will undoubtedly meet with approbation from the professors and instructors in most of the medical schools throughout the United States?

Very truly yours,
JOSEPH P. REMINGTON.

February 3, 1908.

At an informal conference, called by Prof. Joseph P. Remington, of the teachers named below in the medical schools of Philadelphia, the following resolution was passed:

"Resolved, That it is of the utmost importance for accuracy in prescribing, and in the treatment of disease, that students of medicine be instructed fully as to those portions of the United States Pharmacopœia which are of value to the practitioner, and that members of the medical profession be urged to prescribe the preparations of that publication; and further, that this resolution be forwarded to the medical and pharmaceutical journals, and to the teachers of medicine and therapeutics in the United States."

James Tyson, M. D.; John H. Musser, M. D.; John Marshall, M. D.; Horatio C. Wood, Jr., M. D.; H. A. Hare, M. D.; J. W. Holland, M. D.; Alfred Stengel, M. D.; David L. Edsall, M. D.; Seneca Egbert, M. D.; M. C. Thrush, M. D.; James Wilson, M. D.; E. Q. Thornton, M. D.; John V. Shoemaker, M. D.; I. Newton Snively, M. D.; J. M. Anders, M. D.; S. Colis Cohen, M. D.

Free Antitoxin in Illinois.—In the current *Bulletin of the Illinois State Board of Health* appear the details of the plan of antitoxin distribution made possible by the recent appropriation of \$30,000 by the State Legislature. The list of antitoxin stations in the State to the number of 101 is given. Antitoxin is to be supplied free of cost to all persons in the State who may need it; heretofore it has been supplied to the poor only. Antitoxin in packages of 1,000, 2,000, 3,000 or 5,000 units, with a special syringe, will be furnished on the application of the physician in attendance on the person for whom it is to be used. Arrangements have also been made with the University of Illinois whereby a laboratory will be established at the university for the purpose of making bacteriologic examinations. Massachusetts is the only other State which furnishes diphtheria antitoxin free to all its citizens, rich and poor alike. Massachusetts furnishes antitoxin only, while Illinois furnishes both antitoxin and syringe, ready for immediate use. The action of the State Legislature in appropriating money for this purpose is an evidence of progress that ten years ago would have been considered impossible. It is an evidence also of better things in medicine in the future; and especially it is a hopeful sign that in time public aid will be rendered to efforts for preventive medicine.

The Longevity of Physicians.—Dr. Joseph P. Tunis, at the December 11, 1907, meeting of the Philadelphia County Medical Society, showed that the mortality of the medical profession is higher than that of all other occupations. According to Dr. Ogle's statistics, the farmer is the longest lived, and the clergyman enjoys the greatest longevity of the learned professions. G. M. Beard, in 1866, said that "the greatest and hardest brain workers of history have lived longer,

on the average, than brain workers of ordinary ability and industry." Beard found that the average age at death of 500 of the greatest men in recorded history was 64.2. From an insurance point of view, physicians have shown a slightly greater mortality than was anticipated. Taking them as a whole, they are, however, "average risks."

MORTALITY TABLE OF PHYSICIANS AT DIFFERENT PERIODS.

Year.	No. investigated.	Mortality.
1834	624	56.4
1885	3,865	59.3
1886	8,627	56.47
1907	2,000	60.6

Dr. Tunis concludes that statistics prove: (1) The truth of the popular belief that all men live longer nowadays than they did fifty years ago; (2) that the most satisfactory statistics of longevity can be secured only by selecting groups of men living under the same conditions; (3) that the diseases to which physicians are especially liable affect the cardiovascular and nervous systems; (4) that the secret of long life would seem to lie in abstemiousness, brain work and contentment, presupposing a sound mind in a sound body.

A Lay Journal's View of the Osteopathic Situation.

The osteopath bill still hangs fire. The osteopaths should be admitted to practice their theory provided they pass examination by the State Board of Medical Examiners. The rule qualifying doctors to attend patients should be based upon a thorough education in the fundamental laws of medicine and surgery. The practice of the osteopaths by manipulation should not excuse them from knowledge of the general subjects upon which allopaths and homeopaths are examined, and their plea to be called doctors without examination by the State board is not deserving of support. The schools of homeopathy and allopathy are diametrically opposed in theory, yet both schools are subjected to the same examination by the same board upon the same general principles of the practice of medicine. The osteopaths have given no good reason why they should be excepted from this wise precaution imposed by the State.—*Asbury Park Journal*.

This was printed many months ago but it is good common sense now as it was then.—EDITOR.

New Members of the Society for the Relief of Widows and Orphans of Medical Men of New Jersey.—At the January meeting of the Board of Trustees the following were elected members: Drs. H. C. Cory, H. J. Burnett, William Friele, F. G. Shaul, John G. Rea, James Hoffman, Z. P. Fletcher, T. H. Lemmerz, C. P. Opdyke and G. E. Cannon.

New Members of the American Medical Association from New Jersey.—Frank M. Child, Hoboken; Benjamin Gutmann, New Brunswick; Levi W. Halsey, Montclair; George Henry, Flemington; L. Mancusi-Ungaro, Newark; Emanuel D. Newman, Newark.

THE JOURNAL

OF THE

Medical Society of New Jersey

MARCH, 1908.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

ATTENTION! EVERY MEMBER!!

We call upon every member of our County Medical Societies to see, or write to, his Senator and Assemblymen and show them what the passage of an anti-vivisection bill, or one that would unnecessarily restrict animal experimentation would mean. There has been no method of investigation that has done so much to advance our knowledge of physiological and pathological processes and of the means for the prevention, control and cure of disease as vivisection, and to cut off or unduly restrict its practice would mean to retard future progress and the consequent loss of tens and hundreds of thousands of human lives.

We yield to no one in our abhorrence of brutality toward the lower animals; we are in sympathy with the work of the Society for the prevention of cruelty toward them, but far better that a hundred dogs should be sacrificed (without cruelty or undue suffering) than that one human life should be sacrificed for lack of the knowledge vivisection would give us. "Ye are of more value than many sparrows." There is such a thing as "straining at a gnat and swallowing a camel." There is also a sickly sentimentality that means a deathly eventuality. We believe there is no need of any legislative enactment, certainly not of any that would so restrict the practice of vivisection as to rob it of practical results for the protection and saving of human lives.

Assembly Bill No. 118 should be defeated by a decisive majority.

We also call attention to the renewed efforts this year to pass the Osteopathic bill. We need no legislative action, but if some bill must be passed urge your representatives to adopt last year's compromise measure—giving the Osteopaths one member on the State Board of Medical Examiners.

CHANGE OF DATE.

The Annual Meeting of the Medical Society of New Jersey will be held at Cape May June 18-20 instead of June 23-25.

By order of the Board of Trustees,

D. C. ENGLISH, Secretary.

For the reasons of this change, see communication from Dr. Strock, Chairman, Committee of Arrangements, under Correspondence.

Thanks are hereby extended to the many who have sent us letters of kindly expression, helpful suggestion and information concerning local societies and medical men. They will pardon us if they do not receive personal acknowledgment when we assure them that it is not due to lack of appreciation but on account of the enormous amount of other correspondence and work which THE JOURNAL requires.

It is with regret we call attention to the lack of response to our appeal for information concerning the hospitals and other public institutions that care for the sick and mentally and physically defective classes of our State. Special thanks are due and are hereby tendered to Drs. Pinneo and Strasser, reporters of Essex and Hudson counties for several reports received. We believe there are other institutions in other parts of our State. If any have ceased to exist please notify us at least of that fact.

It was a great pleasure to the editor to attend the recent meeting of the Camden County Medical Society, reported in another column, our only regret being that other engagements prevented his stay till the completion of the social part of the program, that being the leading feature of their February meeting. The wives, daughters and sweethearts outnumbered the doctors. We were pleased to find abundant evidence of a live, aggressive, united society with constant accession of new members. It was an added pleasure to find present representatives of the Burlington and Gloucester county societies. We commend this intervisitation and occasional social

gathering as tending to increase the activity and unity of the profession.

It was with deep regret we heard of the illness of the president of the Camden society—Dr. T. G. Bushey, who was suffering from a relapse of the grippe with complications of a serious nature, resulting from exposure during convalescence from the previous attack.

We were exceedingly sorry to find on calling recently, our esteemed friend Dr. William Elmer again confined to his bed and weakened by his severe illness and express our own and we believe our entire membership's hope for his recovery as we we again extend to him our heartfelt sympathy. We are happy to state that Dr. Bushy is slowly recovering as is also Dr. Harry Jarrett, of Camden, from a severe attack of pneumonia.

We extend thanks to the Medical Record of New York, and Dr. Stedman, its editor, for favors received. We insert in this issue two papers from the Record—Drs. Dunham's and McGrath's which are worthy careful reading.

Special attention is called to the communications on Vivisection under the head of Correspondence. They are practical and convincing to any open, honest mind that holds *human* life worthy of protection. It would be humorous, if it did not savor of trifling on a serious subject, to dissect the arguments of some anti-vivisectionists in the daily press. They evince the grossest ignorance or intentional perversion of truth for popular effect upon the ignorant. Almost all cite one or two instances of cruelty practiced which, if true, every honorable vivisectionist would condemn.

Some anti-vivisectionists are cruel to their wives and children—they are fearfully cruel in seeking to rob them of such remedies as antitoxin in diphtheria which vivisection has given us—but we would not therefore condemn all husbands, nor suggest the pas-

sage of a law to prevent marriages, or to regulate too strictly the relations between husbands and wives in order to prevent pain or distress.

INSURANCE EXAMINERS' FEES.

We are pleased to add to the list of life insurance companies paying a \$5 fee for examination the Hartford Life Insurance Company. There are a few left seeking cheap doctors. A recent conversation with one life insurance medical director in this State drew out the statement that they were compelled to pay 168 examiners \$5 *because the profession was united in their sections and they could not get any doctor to examine for \$3*. Medical men of New Jersey, think over this and see the advantages of united action! Shall Texas, Kentucky and California physicians take a united stand for the right, and New Jersey physicians allow a few medical directors receiving large salaries to decide what our services are worth and pay us inadequate fees? He also thought \$3 was enough and compared it with what we received for an ordinary visit. It is just about as sensible as to argue that the surgeon who performs a major operation for which from \$200 to \$500 is the usual fee should receive only the amount—fifteen to twenty-five dollars—that the physician gets for a labor case which requires two or three hours time for delivery and five or six subsequent visits.

"THE KNIFE IN CANCER."

AN EXPLANATION.

We have no apology to offer for the insertion of a brief article in our last issue on "The Knife in Cancer." It has had the desired effect—calling out an excellent reply from our president, Dr. E. T. Ill, which will be found on page 401 of this issue. We had hoped to hear also from others. It doubtless escaped the notice of many of our readers that the article appeared under the heading, "Daily Press and Magazine Items." This department was added to our Journal to let our members know occasionally what the non-medical press have to say of our profession and its work, and we wished to hear from our members what they have to offer in reply, if any articles need or are deemed worthy of reply. We had intended to add to this special article our query, What have our surgeons to say on this sub-

ject? but, in the haste of sending matter to the printer, it was overlooked.

We call the attention of our members to the following which appeared in every one of the last twenty-eight annual volumes of our old "Transactions":

"The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers; nor for the reports of clinical cases furnished by the reporters of the District Societies. Transactions 1876, page 38."

The Medical Society of New Jersey is certainly not responsible for articles which appear in its Journal copied from the daily press. The editor, fully aware of the unscientific character and erroneous statements of much of the medical matter which appears in the daily press, because written by non-medical men, sometimes by charlatans or exploiters of nostrums, certainly does not wish to be understood as endorsing such articles. We do not endorse all the opinions and statements made by medical men in our Journal, for we believe scientific progress is sometimes retarded by them in jumping at conclusions not scientifically demonstrated.

Concerning this special article, we shall be very sorry to be represented as endorsing it. Dr. Saleesby's quoted opinion that "the knife may be in time discarded," may be true—the time probably being when our knowledge of this disease shall be sufficiently advanced to enable us to succeed in our efforts to control and prevent it. Dr. Bell's quoted suggestion that "the disease is amenable to treatment through diet, and the reclamation of the vitiated cells by means of a healthier blood stream," sounds well, but it lacks the specific direction how this is to be scientifically accomplished and the information as to how far his theories have been demonstrated as correct in their application.

The article from *The World* seems to us absurd; it is too general in treating of the disease called cancer—failing to differentiate its various forms and manifestations in various organs and parts of the body. That the knife is essential or valuable in all forms, and all cases of any form, we believe no surgeon of any standing will maintain. That the knife has saved many thousands of lives and prolonged the lives of many more thousands we presume no intelligent physician will deny, and no intelligent non-medical editor can successfully challenge or disprove.

We need as physicians to have a care as to the wisdom and accuracy of our statements in private and to the public concern-

ing the character and treatment of disease. We ought also to impress upon editors and managers of the daily press the fact that the old saying, "A little knowledge is a dangerous thing," is nowhere so applicable as in the discussion of medical matters in the daily press.

HEARING ON THE VIVISECTION ASSEMBLY BILL NO. 118.

Before the Judiciary Committee of the Assembly at the State House, Trenton,
February 24, 1908.

The gathering of medical men in the Assembly chamber at Trenton, Monday afternoon, February 24th, was one of the most representative ones of the profession which ever assembled in the State House. There were about 250 prominent physicians from all parts of the State, with several of the leading professors of medical colleges from New York City and Philadelphia, from Princeton University and Rutgers College and the Rockefeller Institute for Scientific Research. Never have we listened to a weaker advocacy of any bill before a legislative committee than that made by the anti-vivisectionists, and never to more eloquent, forceful and convincing arguments than those which set forth the great blessings vivisection has conferred upon humanity. The advocates of the bill were given the first forty-five minutes; there were four men and two women who spoke. They disclaimed opposition to vivisection but wanted such regulations, restrictions and inspections as would practically have prevented the wonderful progress the science of medicine has made through the practice of vivisection in the past and would greatly retard future progress. They would confine it to the medical schools. They magnified the number of cases and degree of cruelty; represented that boys in our schools, in one especially, were torturing cats; that there was no law to prevent cruelty, yet one speaker cited a case where a young man practiced cruelty and the law took hold of and punished him. Another asked that as we regulated the liquor traffic, why should we not the practice of vivisection? One stated that many able surgeons were opposed to vivisection, deeming it unnecessary. To questions asked by members of the legislative committee they could cite no cases of their own knowledge of torture in this State, only what they had read in the papers; they did not know that boys in a certain school tortured cats, but had been told so; they

could not give the name of one able surgeon who was opposed to vivisection; they acknowledged that their bill needed decided changes, that it was too broad and did not mean what its provisions seemed to the committee to require.

One hour was then given to the opponents of the bill. Dr. E. J. Ill led in the discussion, speaking as the president of our State Society, representing 1,400 physicians. Dr. Lowery, who introduced the bill, stated that he did so at the request of another member, that he did not think it was a proper bill and was opposed to its passage. He was followed by Dr. F. D. Gray, of Jersey City; Dr. Herold, president of Newark Board of Health; Prof. Scott, of Princeton University (not a physician); Professors Lee and Curtis, of Columbia College, New York; Prof. Hare, of Jefferson College, of Philadelphia; Dr. Flexner, director of Rockefeller Institute; Prof. Le Fevre, of New York, and Drs. Kipp, of Newark, and Coakley, of New York. These speakers were all exceedingly interesting and practical. They demonstrated that the present laws were perfectly adequate to punish all cases of cruelty or infliction of unnecessary pain; they spoke of the many wonderful results of vivisection in enabling us to understand and treat disease; of the tens of thousands of lives that had been saved every year through knowledge thus obtained, citing among many other diseases the vast reduction in the mortality of diphtheria since antitoxin had been in use—in Newark from 38 to 40 per cent. to less than 6 per cent.; that during the past fifty years the duration of human life had been prolonged 50 per cent. The various sections of the bill were discussed and it was shown that the regulations and restrictions would greatly hamper scientific investigation and retard progress in medicine and surgery. It was also shown that the restriction of the practice of vivisection to the medical colleges would deprive the scientific man outside medical colleges of the chance to promote his own and humanity's welfare. Pasteur made his great discoveries in his cellar and Rokotansky in his garret.

It was declared that all anti-vivisection statement is based not on facts, but on assumptions that are false, several instances were cited of newspaper and circulars statements that were absolutely false. A strong plea was made for liberty of research by vivisection that has proved and will continue to prove one of the most inestimable blessings to humanity. "Talk of cruelty to ani-

mals, this bill means vastly greater cruelty to humanity." "Vivisection means not only inestimable blessing to humanity in saving and prolonging life, but blessing to animals also, for it is saving and caring for multitudes of them."

THE PROPOSED ANTI-VIVISECTION LAW.

The State of New Jersey, with its neighbor New York, is now taking its turn with the anti-vivisectionists. They have induced a member of our Assembly to aid them by acceding to their request to introduce into the Legislature their bill, which is Assembly Bill No. 118, and is entitled "A supplement to an Act, entitled 'An Act for the prevention of cruelty to animals, approved March 11, 1880.'" The bill, which we print below, has been referred to the Committee on the Judiciary, which held a public hearing on Monday, February 24th. The bill is closely similar to one of those now before the New York Legislature, and also to the New York bill of last year, which was killed in committee after a public hearing. It is one of those drastic obstructive measures indicative of a state of mind, in its framers, of a narrowness of view that does not recognize the broadest principles of enlightened humaneness to either animals or men. Its fundamental assumption—that experiments on animals, as now conducted, are cruel—is untrue. Its further assumption that those who have performed such experiments are men of such character as to require supervision, is equally untrue. Proceeding from these false assumptions, its provisions would deprive competent and worthy experimenters of the right to decide as to the conditions under which their work shall be performed, and establish arbitrary rules for their guidance. It would allow their experiments to be subject, at all times, to inspection by agents of societies for the prevention of cruelty to animals, men or women who are unfamiliar with surgical work and incompetent to judge of its significance and the nature of its methods and results. Furthermore, it would require the filing, with the State Commissioner of Health, of semi-annual reports, giving details of all experiments performed—a procedure which would furnish to those who are not in sympathy with such work, data for continued personal attacks and continued legislative agitation. The promoters of such bills have frankly stated their real purpose in

their words — "Vivisection, if possible, should be abolished entirely."

It is not surprising that the medical profession of New Jersey has arisen and expressed itself, in unmistakable terms, in opposition to so iniquitous a measure. Physicians well know that their knowledge is based on the fundamental laws of physiology, which could not have been discovered without recourse to experiments on living organisms. Their whole effort in treating disease is but an effort to restore normal physiological relations. They know, too, that the bases of the modern treatment of disease have been secured almost wholly from animal experimentation. They are not willing that of all the States of the Union theirs shall be the one in which drastic provisions against the most important single source of their knowledge shall be enacted into law. We cannot urge too strongly resistance to the imposition of such a stigma.

VIVISECTION BILL—ASSEMBLY, NO. 118.

STATE OF NEW JERSEY.

Introduced February 10, 1908. Referred to the Committee on Judiciary.

A Supplement to an act entitled "An act for the prevention of cruelty to animals, approved March eleventh, one thousand eight hundred and eighty."

Be it enacted by the Senate and General Assembly of the State of New Jersey:

1. Restrictions on the performance of experiments:

No person shall perform upon a living animal an experiment of a nature to cause pain or other agony or distress to such animal except subject to the following restrictions:

(1) Such experiment shall be performed only under the authority of the faculty of a college or university incorporated under the laws of this State, or under the authority of the State commissioner of health or a board of health of a city.

(2) The building or part of a building in which it is proposed to conduct such experiment must be registered with the State commissioner of health, who shall issue annually upon application to the corporation or board of health applying and entitled to apply therefor, a license describing such building or part of a building and authorizing animal experimentation therein in accordance with this act.

(3) The animal preparatory to and during the whole course of such experimentation shall be sufficiently under the influence of a general anæsthetic to prevent it from feeling pain or other agony or distress. The substance known as urari or curare shall not for the purpose of this act be deemed an anæsthetic.

(4) Every animal subjected to an experiment, if any serious injury has been inflicted, shall be humanely killed immediately upon the conclusion of such experiment, and while under the influence of the anæsthetic, when it is apparent that death must shortly ensue.

(5) All experiments must be performed with a view to the advancement of knowledge which will be useful for saving or prolonging human life or alleviating suffering, and such experiments shall not be made for demonstrating facts which have already been proved.

2. Inspection of places licensed:

Every place where such experiments are conducted, as authorized in this act, shall at all times be open to, and subject to the entry and inspection of a properly accredited agent of any duly incorporated organization or society, having for its object the enforcement of humane treatment of, or for the prevention of cruelty to animals, acting within the jurisdiction of said society, such representative may be a physician or surgeon of good standing and able to show, if requested, the authority for so acting.

3. Reports:

Every person or corporation performing experiments under this act shall make a report, in writing, on the first day of January and July in each year, stating the anæsthetic used, the number and species of animals used and a summary of result of such experiments and file such report in the office of the State commissioner of health.

4. Violation of act:

Any person who shall perform or assist in performing upon any living animal, an experiment of a nature to give pain or other agony or distress, except as provided by this act, or who excludes or assists in excluding any agent at any time from a place which he is empowered by this act to enter, or who prevents or attempts to prevent such agent or representative from exercising the powers of inspection conferred on him or her by this act, or who, being in such place, refuses to disclose his true name and residence to any such agent, or who violates any other provision of this act, shall be guilty of a misdemeanor, and shall be punished by imprisonment for not less than sixty days nor more than one year, or by a fine of not less than one hundred dollars nor more than five hundred dollars.

6. This act shall take effect immediately.

Correspondence.

VIVISECTION.

To Dr. Edward J. Ill., Newark, N. J.

Dear Doctor:—I have heard with much concern that an effort will almost certainly be made at the pending session of the New Jersey Legislature to pass a bill against vivisection. I need not remind you of the importance of experiment to medicine; but it is important to bear in mind that any attempt to "restrict" or "regulate" experiment by law is sure to prove injurious; as no fixed provisions, no matter how seemingly lenient, can be devised, which will not block the path of science in some new direction, or at some future time. The English experience fully shows this; for the new and precious science of bacteriology applied to medicine has grown up since the passage, in 1876, of the law still in force in England, and to this English experimenters have been forced to accommodate their work; and provisions of this law which seemed unobjectionable to English medical men when it was passed, are found now to hamper very seriously the advance of modern medical education.

For these reasons I hope that you will patriotically take some trouble to prevent your State be-

coming the first in the Union to limit the freedom of medical men in research and teaching; that you will induce others to do the like; and that you will promptly use your influence with the State Senators and Assemblymen who represent you, and with the proper committees of the two houses of the Legislature, to prevent the passage of a bill on this subject. Doctors ought not to be singled out to be subject to different laws from other men.

Yours faithfully,

JOHN G. CURTIS.

New York, February 8, 1908.

Assembly Bill No. 118.

HUMANEITY VERSUS HUMANITY.

To the Editor of The Journal:

Assembly Bill No. 118, introduced by Dr. James H. Lowrey, of Newark, February 10, aims to supplement in a vicious way the already beneficent and sufficient statute under which scientific experiments on living animals have been conducted in this State since 1888.

The present law is in connection with the provision governing societies for prevention of cruelty to animals, and provides substantially that the regulations and penalties pertaining to such cruelty shall not apply to properly conducted scientific experiments under the authority of some medical society, and in addition that no unnecessary pain or suffering shall be inflicted, thus recognizing the subordination of a certain amount of unavoidable pain or suffering on the part of lower animals to the scientific search for knowledge which will result in saving lives or alleviating pain or suffering on the part of human beings.

Any legislation which aims in any way to vitiate this principle is dangerous and, in the interest of humanity, should be combatted by the medical profession. Even were the measure in question more innocuous than it is, it should be defeated because it would prove only the entering wedge to more prohibitive legislation in the future.

While several sections of the "Lowrey" act surround the matter of animal experimentation with unnecessary and cumbersome red tape, the particularly objectionable section—the one which strikes directly, and evidently with intention, at successful investigation along these lines is No. 3. It reads as follows: "The animal preparatory to and during the whole course of such experiment shall be sufficiently under the influence of a general anæsthetic to prevent it from feeling pain or other agony or distress. The substance known as urari or curare shall not for the purpose of this act be deemed an anæsthetic."

No extensive analysis is necessary to show that this would prohibit nearly all original investigation, for in most such experiments the value of results consists in a record of future observations on the animal during a period of days, weeks or even months. It would be impossible to keep the animals under even a partial anæsthesia for the necessary period, and even if it were the results would be worthless owing to the complicating state of anæsthesia. Moreover, under the wording of Section 3, no hypodermic could be given without a preceding anæsthesia for a hypodermic injection produces "pain"; further, it is doubtful if a considerable proportion of the animals could be even *handled*, under a strict interpretation of the law, without a previous anæsthesia, for they would show signs of "distress."

The fact is that this third section was evidently

drawn with a cunning hand, ostensibly to add some necessary restrictions to animal experimentation—actually to thoroughly cripple it, so far as this State is concerned. It may fittingly be termed the "joker" in the bill.

The medical profession should lose no time in acquainting our legislators with the fact that practically all opposition to scientific vivisection arises from three classes of people: (1) Those ignorant of the fact that the greater part of modern medical and surgical discoveries have come about through animal experimentation—of this class we may say, as did Christ of his persecutors, "Father, forgive them; for they know not what they do"; (2) The morbidly humane who regard with greater horror the wails of a stray feline whose tail has been trampled on or the howls of a pet poodle on whose foot some one has inadvertently trodden, than the sufferings of a poor little human victim of diphtheria; (3) Those whose personal ease or comfort is disturbed or the value of whose property is decreased by the proximity of a station for animal experimentation. All three of these groups may stand for a sort of sentimental *humanity*—to coin a word—but not for a broad Christian *humanity*.

Once convince a legislator of the one fact that but for scientific experiments on living animals—even accompanied by some necessary suffering—the antitoxin of diphtheria would have been impossible and that such laws as the one under consideration would prevent its further production and there is no danger of his becoming or remaining an anti-vivisectionist.

Finally there is an economic and truly humane side to this question, even to dumb animals, which their wouldbe protectors *at any cost* must admit. Prof. Huxley, in an address before the Royal Society of England, stated that the financial value of "the discoveries made by Pasteur alone through experimentation on living animals would have sufficed to pay the war indemnity of France to Germany."

By means of inoculations practised as the result of Pasteur's experiments in France alone the loss from anthrax had diminished from 10 per cent. in sheep and 5 per cent. in cattle to less than 1 per cent. in sheep and one-fourth of 1 per cent. in cattle. So much for saving of animal lives alone, not to speak of animal suffering.

Assembly bill No. 118 should be so badly beaten that a very long time will elapse before it or any of its ilk will show its head in the State of New Jersey again.

F. D. GRAY.

Jersey City, Feb. 21, 1908.

Prof. Julius Nelson, Ph. D.

Biologist, Agricultural College Station, Rutgers College.

To Whom It May Concern:

This is to certify that I am opposed to any legislation seeking to prohibit or to regulate vivisection, or experiments on living animals.

First—Because such experiments are performed by men of highest character, consecrated to the search for truth, who are the best able to determine the conditions under which such truth can be discovered.

Second—Because the object of such experiments is to ascertain the best way of alleviating disease and suffering, and the only argument that is placed at the foundation of anti-vivisection legislation is that dumb creatures shall not be subjected to suffering; thus both sides to the con-

trovery virtually are working for the same object, one side on purely sentimental grounds objecting to positive measures and advocating only the "let alone" policy; the other side employing the highest faculties and scientific methods for attaining the object in view. It is therefore the battle of opinions of the ignorant versus the enlightened.

Third—The various accessory arguments used by the anti-vivisectionists, such as the cold intellectual cruelty of the experimenters, the uselessness of such experiments, are on the face of them improbable and in their actual reality untrue.

Fourth—Vivisectionists are particularly careful in all their manipulations, and particularly enlightened as to the exact effects on the body of most of the operations, and do take particular pains to prevent unnecessary pain, barring a few exceptions that prove the rule.

Fifth—The progress of medical practice is almost absolutely dependent on the progress of physiology, and the progress of physiology is almost absolutely dependent on vivisection, and has been established and brought to its present state of half-completeness by observation and experiment on living animals. To assert the contrary is to display gross ignorance of physiology.

Sixth—It is impossible to so frame a law that discrimination can be made between experiments to which the anti-vivisectionists would object and those which they would demand, e. g., in case of sickness by diphtheria in the families of anti-vivisectionists they would demand injection of antitoxin, which can be prepared only by vivisection. Many other similar cases might arise.

Seventh—To assert that animals may be killed for food but not used for divulging truth or food for the mind is to place the physical above the spiritual—in fact, the controversy has enough of religious character to put it into the category of "unconstitutional"; for in case the law be passed and an earnest student seeking truth violates its provisions, he would be incarcerated or fined for the practice of his convictions, and such punishment would be persecution, and he would be a martyr, and that at once would stamp the controversy as of the nature of religious. The propaganda has all the ear-marks of the medieval in the name of religion and science.

JULIUS NELSON.

New Brunswick, N. J., Feb. 24, 1908.

"THE KNIFE IN CANCER."

DEAR MR. EDITOR:

In the last number (February) of *THE JOURNAL*, the article copied from an editorial in the *New York World* on the question of "The Knife in Cancer," should not pass without comment. I do not know who Dr. Bell may be, nor of his standing in the profession, or his attainments as a surgeon; I do know, however, that the foremost men in our profession, both in this country and abroad, urge an early diagnosis of cancer as the only hope; that its removal may be undertaken with some degree of ultimate success and cure.

In looking over the articles written by such excellent men as Dollinger of Budapest, Halsted of Baltimore and Willy Meyer of New York, we find that Dollinger reports that 41.93 per cent. of his cases are free from recurrence after five years; his deductions are made from 175 cases reported. Halsted, in the "Transactions of the American Surgical Society," reports 75 cases of

cancer of the breast as cured; these being 35.6 per cent. of the traced cases.

These cases include all his operations for cancer of the breast. He very truly says: "Fortunately, we no longer need the proof which our figures unmistakably give, that the slightest delay is dangerous and that other things being equal, the prognosis is quite good in the early stage of breast cancer, two in three being cured, etc."

Dr. Halsted's statistics will pay perusal, as well as those of Willy Meyer, who, in the same transactions, reports 80 cases of which 35 per cent. were alive and well at the time of his report. It furthermore appears from his statistics that 39.9 per cent. remained free from recurrence of from three to twelve and a half years after operation. These reports might be duplicated again and again. I only speak of these because they came into my hands lately.

When any of the many medicines and non-surgical treatments suggested and advised will produce any such results as the above, then such a publication as that appearing in the *World* and our *JOURNAL* will be called for and no longer perniciously harmful. It should be every medical journal's duty to constantly place before its readers the importance of early diagnosis in cancer.

Maybe it will interest your readers to know of some of the many medicines recently advised and discarded both here and abroad—the following is only a partial list: Trypsin, sodium kakodylicum, arrhenal, nehtreanin, sulpho-muriate of quinine, lysol, osmic acid, mizin, formic acid, formaldehyde, thyreoidin and castration. adrenalin, hemisin, Doyen's serum, easin, local application of ethyl chloride, liquid carbonic acid gas and liquid air, hydrated carbonate of sodium, the arsenic pastes, radium and X-rays, besides the various antitoxins and serum treatments. Dr. Coley's serum for sarcoma is the only one that has been brought before us with some show of success in the doctor's own hands and that for the treatment of sarcoma.

Yours very truly,

EDWARD J. ILL.

Newark, N. J., Feb. 13, 1908.

ANNUAL MEETING—CHANGE OF DATE.

Dear Dr. Ill:—

In making inquiries about the Hotel Cape May, designated as the place for the Society's next meeting on June 23–25, 1908, the manager informs me that it was engaged by the Pennsylvania Bar Association for the above dates last June. He was under the impression that our meeting was the week previous thereto. Any change of date for our meeting must be made by the Board of Trustees, and I would suggest that a meeting be called to consider the question.

Our Committee of Arrangements recommend that the meeting be held at the Hotel Cape May on Thursday, Friday and Saturday, June 18–20, for the following reasons: The State Board of Medical Examiners meets June 15–17 and its members would be debarred from attending our meeting if held those days, and to hold it the week following that originally fixed upon would run us too near the Fourth of July. The two trustees resident here and many physicians in this section of the State have expressed the opinion that June 18–20 would be a very desirable date for our meeting, as it would enable some to stay over Sunday. The rate will be \$3 per day, and in

consideration of the change proposed, this rate will continue good until July 1st. The management propose to give a banquet to the Society on one evening to be selected, and they suggest that two or three prominent guests be invited to respond to toasts, the Governor to be one; the guests to be entertained at the expense of the hotel. This and other suggestions will be considered by the committee, with your advice and consent.

Yours very truly,

DANIEL STROCK,

Chairman Com. of Arrangements.

Camden, N. J., Jan. 29, 1908.

Therapeutic Notes.

Coryza.—By E. S. McKee, M. D., Cincinnati, Ohio.

℞ Adrenalin chloride (1:1000), 4.00.
Cocaine hydrochloride, 0.60.
.8 per cent. salt solution, 60.00.

M. S.: Use as spray two or three times daily, patient lying down a few minutes after using the spray to facilitate the medicine running back into the nose.

Patient should remain indoors for some time after this.

Adrenalin is being used quite a good deal in nasal troubles, and seems to act well in ointment, as the effect is kept up longer. Following is a good ointment:

℞ Adrenalin chloride, 0.03.
Normal salt solution, to make 16.00
Hydrous wool-fat, 16.00
White petrolatum, 18.00.

Dissolve the adrenalin chloride in a few cubic centimeters of normal salt solution and incorporate with the lanolin, previously melted and allowed to become nearly cold. Finally add the petrolatum and mix well.

This ointment is of the same strength as the 1:1000 solution, and should be reduced one-half by the addition of petrolatum in most cases.—*Therapeutic Gazette.*

Cystitis, Subacute.—Patients complain of discomfort, frequent urination, inability to hold urine for any length of time, and considerable tenesmus. The total daily amount voided does not vary much from normal, and in reaction ranges from alkaline to acid, more frequently the former or neutral in most of my cases. On standing a heavy cloud composed largely of mucus rarely becoming purulent may settle in the urine. I usually find the phosphates increased and decomposition seems rapid. In some females considerable pruritus vulvæ due to irritation may be present.

When the latter is markedly troublesome I use ung. zinc, oxidum, containing one per cent. of carbolic acid. In some cases that have become chronic and exhibit purulent conditions or a teneaceous mucus exudate with an atonic sluggish bladder wall, I wash the bladder daily with a pint of warm boric acid solution. But for the ordinary run of cases I have found something like the following gives me good results:

℞ Tinc. cantharides3ss
Fld. ext. conium3iiss
Fld. ext. triticumq. s. 3iv

M. Sig.—One dram every three hours.

The cantharides stimulates the mucosa and the sphincter muscle. The conium relieves the tenesmus and seems to possess slight tonic effects on the genito urinary system. Triticum I consider one of our best demulcent diuretics, increasing the flow of urine and allaying irritation. In incontinence due to senility I add strychnine for its tonic effect.—J. J. Boynton, M. D.

Erysipelas.—The following local application is recommended by Meunier:

℞ Mentholgr. xl
Pulv. camphorægr. x
Olei betulæ3j
Guaicolmx
Petrolati liq.3iij
Lanolini3iv

M. S.: Apply locally with slight friction.—*International Journal of Therapy.*

Hemorrhoids.—The following combination is useful:

℞ Ext. Belladonnægr. x
Acidi Tannicigr. vi
Hydrag. Chloridi Mitisgr. xxx
Cocainæ Hydrochlorgr. vi
Unguenti Petrolati3i

Wash the parts well and apply locally, night and morning.—*Jour. A. M. A.*

Hemorrhoids Suppositories.—

℞ Chrysarobini|08 (gr. 1½).
Iodoformi|02 (gr. ½).
Ext. belladonnæ|01 (gr. 1-6).
Olei. theobrom12 (gr. xv).

M. Ft. suppositoria No. 1. Use one each night.

Influenza.—To prevent nasal and aural complications, a small amount of the following may be introduced into the nares night and morning:

℞ Resorcingr. xv
Mentholgr. ii
Petrolati3vi

If there is a dry cough, expectoration may be encouraged by the following:

℞ Sodii benzoat3i
Ammon. acetat3iij
Spt. æther, comp.mxxx
Syr. aurant. flor.3i
Codeingr. iv
Aquæ3v.

M. S.: Three to four tablespoonfuls daily. The following may be used as an inhalation:

℞ Menthol3i
Tr. eucalypt3i
Aq. colon3iv

M. S.: A tablespoonful in a bowl of boiling water, inhaled by means of a funnel.—*Medical Press.*

Mumps, Ointment for.—Ragozzi recommends this combination:

℞ Guaiacolisgr. xv
Adipis lanæ, } aa3iiss
Petrolati, }

Ft. ung. Apply night and morning. Cover with absorbent cotton and gutta percha tissue with slight compression.

Neuralgia.—Durand uses locally two to eight drops of a 1 per cent. solution of veratrine in equal parts of diluted alcohol and distilled water (caution against getting it in the eyes), or:

℞ Veratrinæ0.1
Morph. hydrochlor0.1
Ungt. aq. rosæ0.5

M. ft. Ungt.: Apply a very small portion to the painful area with slight friction once or twice a day.—*Journal de Médecine.*

Leg Ulcers.—A. G. Peter, in *British Medical Journal*, commends the use of calcium iodide, stating that in his experience, ulcers which have for years stubbornly resisted all kinds of treatment, and whose owners have without avail been simply saturated with potassium iodide, in a week or two showed clean granulating surfaces, and have in almost all cases healed up. Two or three cases, which are healing more slowly, though immensely improved, are due, the author thinks, not to any deficiency in the drug, but to the ingenuity displayed by their owners in counteracting its effects—to put off the evil day of their discharge from hospital. In all cases the induration around the ulcers greatly diminished or entirely disappeared. He also observed in a few cases of syphilitic necrosis of the nasal bones considerable benefit from its administration, and great relief was obtained in headaches associated with syphilis. The dose given in all cases was two grains in mixture three times a day, and there did not appear to be any increased advantage from augmenting the dose. Any mild external application seemed equally efficacious; in most cases he used a mild mercurial or iodoform ointment.

Pruritus Ani.—Drueck says that when the pruritus is due to proctitis, haemorrhoids, fissure, ulceration, fistula, prolapse or polypus, and the patient refuses to submit to surgical treatment, or in senile, debilitated or haemorrhagic subjects, much relief may be given by the use of the following:

R Calomel	2	(gr. 30)
Menthol	1	(gr. 10 to 20)
Vaseline	30	(3 i)

Sign.—Apply after each bowel movement, bathing the surface carefully and sopping it dry.

For eczema of the anus he employs:

R Picis liquidæ	15	(3iv)
Ung. belladonnæ	8	(3ii)
Ac. carbolicæ	65	(m.x)
Adeps lanae	8	(3ii)

Bathe the parts repeatedly in water as hot as can be borne, and in green soap, to remove the thickened scales and to deplete the local circulation. In exaggerated cases a solution of caustic potash, five grains to the ounce, may be used. A cloth may be used to sop the hot water on the parts, but do not allow any rubbing.—*Chicago Medical Record*.

Rheumatism.—Bourget uses the following:

R Acid salicyl	1.0
Lanolin	1.0
Ol. terebinth. rect	1.0
Adipis	10.0

M. S.: Apply without rubbing and then bandage the joint with flannel.

Rheumatism, Gonorrhoeal.—

R Acidi salicylici	3i
Mentholis	gr. xv
Guaiaacolis	3ss
Alcoholis	f3i

M. S.: To be painted over the affected areas, and the parts covered with cotton and oil silk.—*Merck's Archives*.

Rhinitis, Purulent.—H. M. Roger recommends irrigations of the nasal chambers with hydrogen dioxide solution, combined with an equal volume of solution of sodium bicarbonate (2 per cent.). After the douche, he makes a local application of petrolatum containing 8 to 10 per cent. of menthol.—*Bull. gén. de thérap.*

Current Medical Literature.

Continuous Generalized Spasms and Acute Encephalitis of Infants.—Orazio D'Allocco, in *La Riforma Medica*, describes acute encephalitis in infants as a malady that is generally met with in the chronic stage of paralysis owing to the quickness with which the acute symptoms pass and the obscurity of the symptoms. The disease comes on as a general infection, with fever and symptoms of brain irritation. A continuous, uniform, rhythmical clonic spasm comes on. The limbs are flexed and head extended. This condition is soon followed by paralysis without spastic condition. Electric excitability is increased, and there are no trophic disturbances. There is a stimulation of the central convolutions and central lobules of one or both hemispheres. As long as the stimulation goes on the spasm continues, but when it is over paralysis supervenes. The condition may be of traumatic origin, or a true infective malady. The single autopsy obtained by the author showed that there was an occlusion of the blood-vessels, for the most part venous, sometimes produced by true embolism and followed by acute inflammation or degeneration. The condition is analogous to anterior poliomyelitis. Most of the cases observed by the author were in rachitic babies and in the winter and spring. In the child, the babe, and the fetus, the causes of encephalitis are not the same as in the adult. The venous system is more developed than the arterial; thrombosis of trunks and secondary branches is frequent and does not destroy life.—*New York Medical Record*.

Appendicitis in the Nursing Child.—Henri Mayet says that appendicitis is rare during the first year of life, but that it exists and should be looked for in the course of intestinal troubles. It is never present alone, but is a complication of severe forms of enteritis. In all the recorded cases, which amount to only nine in all, there was present severe enteritis or obstinate constipation. It is to be feared when in the course of an enteritis the abdomen becomes swollen, the muscles tense, the temperature and pulse high, and the percussion note is modified in the right iliac fossa. The age of the patient prevents other localization of the painful symptoms. Flesh eating cannot be given as a cause in nursing children; foreign bodies have not been found at autopsies, and the author refers the disease to enteritis as an exciting cause. Appendicitis is apt to occur in emaciated, cachectic, or rachitic children who are predisposed to any complication. The appendicitis is simply a localization of the enteritis. The prognosis is very bad, since the peritonitis is of the fulminating variety, and death occurs in from one to four days, provided the condition is not relieved by operation at once. In children over one year of age the course is much more mild and the prognosis better.—*Annales de Médecine et de Chirurgie Infantiles*.

Cancer in Children.—P. W. Phillip publishes a monograph on this subject in the *Zeitschr. f. Krebsforschung*, v, No. 3, page 326. He has collected from the literature 390 cases of assumed cancer in children, and classifies them according to location, etc. One feature of the material is the almost complete absence of cancer of the uterus and breast among the girls affected.

Epithelioma is also extremely rare. Most of the cases of cancer developed between 9 and 15, during the age of puberty, and in the digestive tract, the ovaries or skin. The cancers observed in children seem to sustain the theory of irritation as a factor in the origin of cancer, rather than the embryonal theory. The cancer was in the intestines in 29 per cent. of the cases.

Prevention of the Nervous and Mental Disorders Incident to School Life.—

The main points of the paper by J. H. Pleasants, in the *N. Y. Medical Journal*, are thus summarized: (1) Children under eight, or, better, ten, should not attend school if country life and parental attention are possible. (2) City children between five and eight should be placed in kindergartens situated in parks or suburbs, where nature study and systematized play and light ungraded objective work in the open air can be carried out. (3) Schools for older children should be gradually removed to the parks or suburbs and equipped with playgrounds and physical directors. (4) Overstudy and competition among the more ambitious pupils should be prevented, and the leveling of the child to the grade avoided. (5) The hygienic condition of the schools should be maintained at the highest efficiency, both for the effect upon the child's health and as educational object lessons. (6) Physical defects (usually remediable) at the basis of many mental and nervous disorders are principally: (a) Malnutrition, to be combated at present largely by the educational influence of the school nurse; (b) eyestrain, if of advanced grade, or if productive of symptoms, to be corrected, and the wearing of glasses made compulsory; (c) adenoids and enlarged tonsils to be removed; in neglected cases the health department should have power to enforce removal; (d) deafness to be prevented by the better control of epidemics and removal of adenoids. (7) Epileptics to be placed in separate schools, or, better, in rural colonies. (8) The condition of many so-called mental deficient improved or cured by correction of physical defects. (9) Truancy and incorrigibility in many cases due to the handicap upon mental work of physical defects. (10) Education of idiots, imbeciles and the feeble minded, as far as they are capable, in special institutions maintained by the State. (11) The education of children slightly below par mentally in small ungraded classes in the public schools. (12) Substitution of a broad medical supervision over education by a board of physicians and educators rather than mere medical inspection.

Permanent Results of Sanatorium Treatment of Tuberculosis.—

In Germany the eighty-seven public and thirty-seven private sanatoriums for lung affections, with 8,422 and 2,000 beds respectively, are not turning out many permanently cured patients. That is to say, the permanent results of sanatorium treatment are no better than those of dispensary treatment alone for the working classes. This is particularly true of patients in the first stage of the disease. Croissant has been making a special study of the conditions at Heidelberg, comparing the end results of sanatorium and dispensary treatment. The sanatorium treatment is not followed on an average by longer survival, but occasionally the result is a brilliant one. Patients in this class, who live rationally and thus maintain the benefits derived, form an object lesson on the prevention and

cure of tuberculosis that cannot fail to be of far reaching benefit, although the effect cannot be estimated for years to come. The great drawback to sanatorium treatment is that the patients return to their former unhygienic mode of life, and the benefit derived soon slips away from them.—*Journal A. M. A.*, January 4.

The Prevention of Valvular Disease.—Richard Caton (*British Med. Jour.*, August 10, 1907) says that in acute rheumatism and most of the pathological states in which valvulitis occurs we can secure a large measure of rest and of the conditions favorable to heart repair if we take sufficient trouble. We lessen pain and fever by appropriate measures; we insist upon the most absolute quiet and rest, alike of body and mind; a light diet is given, and, if necessary, some sedative. Sodium or potassium iodide is given. Small blisters are applied over the distribution of the first four dorsal nerves between the clavicle and the nipple. The effect of the first group of measures is to slow the heart and diminish its amount of work, offering it the opportunity of self-cure. The second measure stimulates the curative activity of the part. Of these two measures of treatment, the prolonged period of rest is by far the most important. The rest should continue for six or eight weeks or more. By degrees the bruit lessens, becomes intermittent, and at length vanishes. He has witnessed the workingman whose incipient heart lesion has been treated, thus fulfilling year after year his full measure of hard work without dyspnea and without discomfort. The rest treatment must be commenced fairly early before too great an amount of structural change has taken place.

Mixed Toxins in Hodgkin's Disease.—

Dr. W. E. Coley, at meeting of the American Association for Cancer Research, showed a patient with Hodgkin's disease, who had been treated with the mixed toxins of erysipelas and bacillus prodigiosus. The patient, male, aged twenty-four years, first noticed an enlargement of the glands on the right side of the neck a year ago. Three to four months later he noticed an enlargement in the axillary glands and a little later in the glands of both groins. His general health began to fail and he lost twenty pounds in weight. He was admitted to the General Memorial Hospital on October 10, 1907, at which time he weighed 165 pounds. The blood count showed the following: Leucocytes, 4,050; red blood corpuscles, 4,070,000; polynuclear, 62 per cent.; large lymphocytes, 18 per cent.; small lymphocytes, 17 per cent.; transitionals, 3 per cent. The patient was placed on the mixed toxins, the injections being made in the pectoral region. The initial dose was $\frac{1}{4}$ mm.; the highest $1\frac{1}{2}$ mm., which latter caused a temperature of 105.6. At the end of two weeks he developed toxemia and ran a temperature of 102-103, nearly every day, for more than a week, during which time he received no treatment, and lost eight pounds in weight. The toxemia was, no doubt, due to too rapid breaking down of the tumors. After the temperature fell to normal the toxins were resumed in smaller doses. Up to November 15 he had received fourteen injections, with the result that the tumors of the neck, axillæ and groin have practically disappeared, having diminished fully nine-tenths; the spleen was hardly palpable. The disease in this case was pronounced typical Hodg-

kin's disease (giant celled) by Drs. W. C. Clark and James Ewing. (At the end of another week, November 22, all tumors had entirely disappeared.)

Dr. Coley showed the case as additional evidence in favor of the theory that Hodgkin's disease is really a type of sarcoma, and not an independent infectious disease, as believed by many. He stated that the argument usually advanced against Hodgkin's disease being a malignant tumor, was that it was never encapsulated; in its extension throughout the body it always confined itself to lymph gland tissue. This, however, he declared, was by no means true. He cited a personal case in which the tumor had been examined by Dr. Ewing, as well as by a number of other men, and pronounced typical Hodgkin's disease of the giant-celled type. Clinically, it was typically sarcomatous, and autopsy showed that in the inguinal region, the point of origin in this case, the tumor which was larger than a child's head, not only infiltrated the capsule, but infiltrated fascia, muscle, periosteum and bone, precisely like a malignant tumor.—*Jour. A. M. A.* (Jan. 4).

Early Rising After Normal Labor.—Bouchacourt, in the *Presse Medicale* (Paris), reviews the opinion expressed with regard to the disadvantages and advantages of the puerperal woman leaving the bed early after a normal labor. The dangers which are encountered by this practice are divided into first, the danger of infection; this the author concludes is due not to leaving the bed, but to neglect of aseptic precautions. Second, danger of arrest of the involution of the uterus. Involution appears, according to various authors, to be actually more rapid after leaving the bed, and to have been completed to a sufficient degree by the ninth to the twelfth day after delivery. Third, danger of uterine displacement. Here again he cites various authors to show that there is less danger of displacement by the movements of rising than by keeping the horizontal position. Fourth, danger of embolism. There is no question that sudden movements may cause the detachment of a clot closing a uterine vessel, and thus provoke hemorrhage or embolism. However, Küstner insists on the fact that in the course of his experimental researches he has not observed a single case of embolism. Fifth, danger of ptosis. This is undoubtedly real, and the authors who recommend leaving the bed early insist on the necessity of applying a proper abdominal bandage. Among the advantages attributed to a short stay in bed are, first, a favorable influence on the digestive function; second, favorable influence on the circulation and urinary function, and third, promotion of the secretion of milk.—*Jour. A. M. A.*

The Frequency, Mortality and Treatment of Placenta Praevia.—Dr. I. L. Hill, of New York city, concludes a paper in the *Journal* of the A. M. A., January 4th, with the following summary:

1. Among multiparae placenta praevia can hardly be called a rare complication. In 1,800 cases, of which 87 per cent. were multiparae and the average number of pregnancies 4 plus, I have found the ratio to be 1 to 225.

2. The mortality has been understated recently because of too broad generalization on a few highly favorable case reports.

3. There has been very little reduction in the

fetal death rate, which is still from 40 to 50 per cent.

4. In the presence of hemorrhage in the last third of gestation the cervix should immediately be dilated sufficiently to allow of a diagnosis by the finger, and if placenta praevia is present the uterus should be emptied without delay.

5. Tamponade of the cervix and vagina is useful as a preliminary step.

6. The Braxton-Hicks version is effective in controlling hemorrhage and is the safest procedure for the mother, but it does not give satisfactory results for the child. When the dilatability of the cervix makes us positive that delivery can be effected with little or no tearing of the cervix we may elect rapid delivery by version or forceps, packing the uterus and vagina if there is bleeding after the third stage.

7. In cases presenting long, rigid cervices, complete praevia and a viable child, if the surroundings are favorable, Caesarian section should be chosen in the interests of the child.

8. The advance in treatment for placenta praevia has been remarkable in reducing the maternal death rate even though the saving of the patients has not been brought so near to being an exact science as some authors would suggest. It would seem that progress must be directed to decreasing the fetal mortality.

Although the anal reflex requires profound anesthesia to abolish, chloroform or ether is not always needed in order to divulse the sphincter ani. This may be accomplished painlessly, and usually with entire satisfaction, under ethyl chlorid or nitrous oxid narcosis if, especially, an opium suppository is introduced a half-hour beforehand, and a pledget of cotton wet in cocain solution is applied just before the operation.—*Amer. Jour. of Surgery.*

Deaths.

BALDWIN—At Newark, N. J., February 9th, Dr. Aaron K. Baldwin, after a protracted illness from cirrhosis of the liver. He was a son of the late Dr. Milton Baldwin; was born June 28, 1849; graduated from the New York Medical University in 1872; was associated with his father in the practice of medicine until the latter's death ten years ago. He was elected surgeon of the First Regiment, National Guard, with the rank of captain and later was surgeon of the First Brigade with the rank of lieutenant-colonel. In 1890 Governor Abbott appointed him on the State Board of Medical Examiners, which position he held until 1906. In 1875 he was appointed police surgeon, and again in 1884, and from 1873 to 1888 was house surgeon of St. Michael's Hospital. He was also a member of the visiting staff of the City Hospital. His widow and a daughter survive him.

PROBASCO—At Plainfield, N. J., February 25, 1908, Dr. John B. Probasco, aged sixty-six years. He was born in Greenwich, Cumberland County, N. J., in 1842; graduated from the University of Pennsylvania Medical College in 1869 and soon after began the practice of medicine at Plainfield, which was continued there till the time of his death.

[The sad news of Dr. Probasco's death came as the JOURNAL was going to press. We have asked Dr. E. W. Hedges to prepare an obituary notice of him for our next issue.—Editor.]

Book Review.

SYPHILIS. A Treatise for Practitioners. By Edward L. Keyes, Jr., A. B., M. D., Ph. D. Clinical Professor of Genito-Urinary Surgery, New York Polyclinic Hospital, etc., New York and London. D. Appleton & Co., 1907.

Forty years ago the name of Van Buren stood among the highest in the ranks of genito-urinary surgeons. Later Van Buren and Keyes maintained the same high standard and now Edward L. Keyes, Jr., succeeds to their work and adds the fruits of his experience to those of his predecessors in the above named treatise. The carefully collated records of the private cases of these three generations of genito-urinary surgeons have been used in preparing this work. These records have a great advantage over the hastily written and often fragmentary notes obtained from clinics and dispensaries, in that they contain histories of cases which have been carefully treated and individually watched for a number of years. The deductions arrived at from a consideration of these records are entitled to great weight, even though they may differ from those commonly accepted. The book, printed in large, clear type, contains nearly 600 pages and numerous illustrations, some of which are beautifully colored. It is a very valuable work for the general practitioner and should receive the especial attention of all syphilographers.

Received too Late for Insertion.

Two communications were received too late for this issue of our JOURNAL: One concerning the International Congress on Tuberculosis, Washington, D. C., September, 1908; the other from Dr. Weiss, Secretary of the Newark Medical League concerning the address of Dr. W. P. Northrup, of New York, on "The Open Air Treatment of Pneumonia," before that organization recently. The League unanimously adopted a resolution opposing Assembly Bill 118. These communications will appear in the April issue of THE JOURNAL.

Personal

Dr. Noble H. Adsit, of Succasunna, has recovered from a severe illness. **Dr. C. R. P. Fisher**, of Bound Brook, announces that **Dr. Howard L. Kaucher** is associated with him in his professional work. **Dr. H. H. Janeway** has removed from New Brunswick to New York city where he is associated with Dr. L. D. Bulkley. **Dr. D. L. Morrison**, of New Brunswick, has also established his office in the Holland House, New York city. **Dr. Percy Schureman** succeeds Dr. Morrison in New Brunswick. **Drs. L. P. Runyon** and **H. C. Voorhees** have recently begun the practice of medicine in New Brunswick.

A meeting of the board of managers of the State Village for Epileptics, at Skillman, was held January 8th at the State house, Trenton. At its conclusion a dinner was tendered to **Dr. Henry Weeks**, the retiring superintendent of the home, who will take charge of a similar institution at Spring City, Pa., and to Mrs. Weeks and to **Dr. David Weeks**, the new superintendent. Gov. Stokes was the guest of honor. A testimonial in book form, bound in sealskin, was presented to Dr. Henry Weeks, and a silver loving cup to Mrs. Weeks by William E. Drake on behalf of the members of the board.

Dr. H. C. H. Herold has been elected president of the Newark Board of Health for the thirteenth consecutive term.

Dr. James Hunter, of Westville, has been elected president, and **Dr. H. A. Stout**, of Weonah, secretary, of a Physicians' Protective Association of Woodbury and vicinity, to secure the collection of bills.

Dr. J. P. Reilly was reelected president of the Elizabeth Board of Education January 3, and **Drs. J. Funk** and **J. H. P. Conover** were elected Medical Inspectors of Newark.

Dr. Charles J. Kipp is enjoying a season of rest at Palm Beach, Florida, expects to return about March 15. **Dr. E. L. B. Godfrey**, of Camden, is also sojourning in Florida for a few weeks.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics—January, 1908.

The number of deaths reported to the Bureau of Vital Statistics for the month ending January 15, 1908, was 3,381, an increase of 92 over the corresponding period last year. By ages, there were 555 deaths among infants under one year, 285 deaths of children over one year and under five years, and 1,046 deaths of persons aged sixty years and over. Pneumonia was the leading cause of death with an increase of 195 over last month and 79 over the same period last year. This disease is undoubtedly communicable from person to person, but the infective organism of pneumonia is frequently present in normal saliva, and therefore unfavorable weather conditions, or other influences which lower the vitality, lead to the development of the disease.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending January 15, 1908, compared with the average for the previous twelve months. Those of the previous twelve months are given in brackets:

Typhoid fever, 49 (38); measles, 6 (13); scarlet fever, 39 (21); whooping cough, 7 (24); diphtheria, 70 (55); malarial fever, 5 (2); tuberculosis of lungs, 284 (314); tuberculosis of other organs, 42 (50); cancer, 150 (122); cerebrospinal meningitis, 26 (30); diseases of nervous system, 409 (394); diseases of circulatory system, 360 (325); diseases of respiratory system (pneumonia and tuberculosis excepted), 273 (180); pneumonia, 411 (264); infantile diarrhoea, 80 (212); diseases of the digestive system (infantile diarrhoea excepted), 215 (202); Bright's disease, 255 (207); suicide, 35 (30); all other causes, 665 (593); total, 3,381 (3,076).

Food and Drugs.—During the month ending January 31, 1908, 482 samples were examined under the direction of the State Board of Health, in the State Laboratory of Hygiene. Of these foods and drugs we give the following found below the standard; the numbers of specimens examined are given in brackets:

Milk, (82), 12; butter, (19), 10; sweet cider, (5), 2; cider vinegar, (99), 14; spirits of camphor, (18), 13; tincture iodine, (36), 27; tincture opium, (3), 3. Number of samples of water analyzed, 54.

Bacteriological Examination for Diagnosis.—From suspected cases of: Diphtheria, 514; tuberculosis, 296; typhoid fever, 171; malaria, 9; miscellaneous, 10; total, 1,000.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 10.

ORANGE, N. J., APRIL, 1908.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

A TALK ON MORBID PSYCHOLOGY.*

By **Frederick Peterson, M. D.,**
New York City.

*Professor of Psychiatry, Columbia University;
Ex-President of the New York State Commission in Lunacy.*

The study of morbid psychology should have interest for the general practitioner for many reasons. Cases of insanity are certain to be encountered in practice, for this disorder afflicts one in three hundred of the population. The physician should be able to make a diagnosis of the form of the disease, have some knowledge of the course and outcome of the type presented, and understand the principles of care and treatment in order to avert accident and disaster. Furthermore, he sees the patient at the very beginning of the disease, before a specialist or asylum is thought of, when wise measures may abort the impending malady.

A study of insanity throws much light upon problems in normal psychology, and, moreover, there are other fields besides that of insanity where the physician is brought into contact with important departments of morbid psychology. He constantly meets with hysteria, that protean disease which simulates nearly all others, and which is essentially a disturbance of mind and requires to be treated understandingly through the mind. The diagnosis and treatment of neurasthenia also, which is so common a disorder among us, must depend largely upon a knowledge of morbid psychology. Then,

too, the practitioner is brought into contact with nervous children, who may later on develop mental disease; with eccentric persons tainted by a neuropathic heredity, and with a large catalogue of deliria associated with fevers, pneumonia, cerebral hemorrhages, tumors of the brain, alcoholism, drug habits and the like. Some of these deliria closely resemble insanity and many actually result in insanity.

Aside from these large and varied relations of disordered mind to medicine, there are points of contact with another profession, viz., the law, and it behooves the medical man to learn something of these methods of determining capacity to make a will, and of estimating responsibility for theft, assault, murder and other crime. He has also to familiarize himself with the proper methods of preparing commitment papers for the reception and detention of the insane in asylums, an important medico-legal procedure.

If there were time I should like to discuss with you a still more interesting phase of morbid psychology, viz., its relation to great historical events and movements. You will recall that there was a noted French alienist, Moreau de Tours, who was in the habit of saying that all the great accomplishments of the world have been the work of madmen. Like many another aphorism, this has some truth as a basis, though not sufficient for so wide a generalization. It is certainly true that many wonderful things have been done by individuals who were subject to what we call abnormal nervous and mental symptoms, such as visions, trances, fainting attacks and the like. Mahomet, who founded one of the three great religions of the world, seems to have had

*Read before the William Pierson Medical Library Association at Orange, N. J., March 10, 1908.

visions, trances and hystero-epileptic seizures. Swedenborg, a practical scientific man, and one of high genius, who created a religion counting among its devotees tens of thousands of the best people in all lands, saw visions and claimed to be able to see events occurring hundreds of miles away. Napoleon, who changed the political geography of Europe and made and unmade kings, had *petit mal* and is said to have had hallucinations at times. Perhaps the most remarkable person in history is Joan of Arc. Picture to yourselves a simple peasant girl, in a barbarous century, untrained, unable to read or write, who at the age of fifteen years had already resolved, under the inspiration of her voices, to break the English power that had dominated France for more than one hundred years. At seventeen years of age she was made commander-in-chief of the armies of France, displayed astonishing military genius, over-rode the generals who opposed her, planned her campaigns, selected with unerring instinct the best men for the most responsible positions, worked day and night over the endless details of organization and administration of the army, but always under the guidance and direction of her voices. She led her soldiers to victory after victory till she crowned Charles VII. king of France and destroyed the English power. She seemed to have foreknowledge of many events, her own future, of her first wound, of her being made a prisoner at Compiègne, of her death. More remarkable than anything in her military career is the story of her conduct at the Rouen trials. After a brutal prison life in chains for nearly a year, she was brought before a jury of sixty picked intellectual men for cross-examination. For three months she sat before them, often six or seven hours a day, answering their questions. Every trap, every snare that cunning could devise, was laid for her, yet she was more than a match for them. Such answers to such questions are hardly to be accounted for on any theory acceptable to scientific men to-day. She was burned to death at the age of eighteen. Every fact in her wonderful history is a matter of documentary proof, of legal record.

There are other seers of visions and dreamers of dreams over whose names I should like to linger, but this of Joan of Arc is preëminently an example of the kind of mind under consideration. Such wonders baffle us. It is claimed by many that these illustrious beings who have exhibited what we physicians call morbid mental

symptoms, are different from ordinary individuals because they are inspired, that they are not abnormal but rather supernormal. While it is safest for us as medical men to accept only such phenomena as true and actual as come within the range of natural manifestations demonstrable by scientific method, yet we must keep in mind "the million acres of our ignorance" and never be too positive in our opinion of the unexplored and unknown regions of the mind. "There are more things in heaven and earth, Horatio, than are dreamed of in your philosophy." When, on the other hand, we examine the biographies of some of the supreme intellectual giants like Plato, Aristotle, Shakespeare, Newton, Goethe, Darwin, Spencer, we are not able to discover among these any such extraordinary phenomena.

What is insanity? I am not going to attempt to define it. Too many medical men have tried and failed to formulate a definition adequate from the medical and legal point of view. Let us rather say with the layman that insanity is a long dream. He said also that a dream is brief insanity. There is indeed a more than superficial resemblance between dreams and insanity, so close a relation, in fact, that many psychiatrists are now devoting themselves to a study of dreams as a part of their clinical and scientific work. There is in both a prominence of visual and auditory hallucinations, a tendency to the reproduction in memory of old experiences, the imaginary fulfilment of wishes and desires, baroque associations, chaotic flight of ideas, incoherence, weakened judgment, disorientation, or loss of sense of time and space, and divisions of personality. In fact, there is no phenomenon that presents itself in dreams which we may not observe among the insane of an asylum ward. Sometimes insanity first manifests itself in dreams, though the mind is still normal by day. In alcoholism dreams sometimes foreshadow the characteristic alcoholic delusions (of infidelity, etc.) and dreams may be the equivalents of epileptic seizures. Sometimes in patients just recovered from insanity who are normal by day, there is a nightly recurrence of insane delirium in sleep, a species of nocturnal insanity. A terrible dream may usher in insanity, which then concerns itself with the material created by the dream. Dreams at times induce the imperative ideas and impulses of neurasthenia. Thus in a way we may look upon insanity, in itself a pathological condition, as a summation of periodically

recurring normal dreams, as a kind of reduction of consciousness, such as exists in the dream-state. Sanity is the sunlit day of full consciousness, insanity the moonlit night of the subconscious full of mysterious and fantastic distortions of reality.

The examination of a patient with mental disorder is a much more complex process than that of a case of physical disease, for it is necessary in the former not only to ascertain the present physical condition, as with your ordinary patients, but also to investigate the mental state which involves the employment of unusual and new methods and brings us into contact with a novel series of psychic phenomena; and, moreover, to attain our end we need to study the whole past life of the patient, his disease, accidents, schooling, occupation, environment, temperament and character. Nor can we stop here, for it is of the greatest importance to inform ourselves as to conditions among his antecedents, to determine the type of family from which he sprang, and the presence or absence of a hereditary taint. There is therefore much to learn even before seeing the patient in person. The history of a case of insanity as now recorded in our New York State hospitals makes a rather formidable volume. It includes every kind of physical record made in general hospitals, as well as a thorough survey of the patient's life and ancestral conditions, and keen psychological analyses of his psychosis and its beginning and progress.

The question of heredity in nervous and mental disease is fortunately growing in public interest, and of late years I have frequently been consulted by persons desiring to marry as to the probable bearings of insanity or epilepsy in one of the families upon the proposed alliance. I am inclined to be lenient, though careful, in making decisions here, for a thorough study of the problem of heredity in relation to nervous and mental disease has yet to be made. Though epilepsy is the most strongly hereditary of all neuro-psychoses, I have known epileptic parents to have normal children. Curious and remarkable as are the facts of heredity as we see them in connection with nervous and mental maladies, the heredity of normal organs and functions as shown in every reproduction of animal or plant life is more wonderful still when we come to look closely into it, and we must not lose sight of the fact that with every birth normal heredity presses down upon the new-comer with all the force of a hundred mil-

lion years to make and keep him an average normal creature. We may cut off the tails or ears or horns of countless generations of our domestic animals, but these appendages continue to reassert themselves at every birth. Perhaps we need not think too seriously of the prospects of the human race if in our own country we contrast the 150,000 insane and 80,000 criminals with the 80,000,000 normal human beings.

But whatever optimism we may feel as to the progress and high destiny of the race, that has triumphed over all obstacles from the earthquakes, deluges, glacial periods, carnivorous monsters, warring tribes of ancient periods to the wars and plagues and famines of historic times, we as physicians, must fight strenuously for the individuals who are perishing all around us from preventable disorders. The race will doubtless take care of itself. The percentage of insanity acquired through preventable causes like alcohol and syphilis is very large. In the State of New York there are about 30,000 insane in the public and private hospitals. Twenty per cent. of these owe their insanity to alcohol, 6,000 persons. As each insane person represents an approximate loss to the State of \$400 annually, New York loses then some \$2,400,000 annually through the ravages of alcohol as regards insanity alone, without reference to pauperism and crime. As regards syphilis, some 5,000 patients have died from that metasyphilitic and fatal disease, general paresis, in the State hospitals of New York during the past nineteen years.

Now to turn for a little to the classification of mental disorders. I will first call your attention to the following grouping which seems to me at this time to answer best the needs of the general practitioner: *A Classification of Mental Disorders for the General Practitioner:*

TOXIC AND EXHAUSTIVE PSYCHOSES:

Puerperal	Alcohol
Lactational	Morphine
Renal Disease	Cocaine
Typhoid	Chloral, etc.
Pneumonia	

PSYCHOSES WITH NERVOUS DISEASES:

Polyneuritis	Epilepsy
Chorea	Hysteria

PSYCHOSES WITH ORGANIC BRAIN DISEASE:

Apoplexy	Trauma
Arterio-Sclerosis	Meningitis
Tumor	Insolation, etc.
Syphilis	

MANIC—DEPRESSIVE INSANITY:

Melancholia	Mania
-------------	-------

DEMENTIA PRÆCOX:

Hebephrenic Katatonic Paranoid

GENERAL PARESIS

PARANOIA AND PARANOID CONDITIONS

SENILE PSYCHOSES

CONSTITUTIONAL PSYCHOPATHIC STATES

IDIOCY, IMBECILITY AND FEEBLEMINDEDNESS

You know that the immense progress made in surgery and general medicine in the past thirty years is also reflected to a great extent by a marked progress in psychiatry. We have gained enormously from the clinical and therapeutic standpoint, and there has been advance in our knowledge of etiology and pathology. You will note in this classification some new terms, particularly manic-depressive insanity and dementia præcox. The mania and melancholia that you were formerly taught to recognize as separate syndromes, have now been brought together under the one term for they seem to be only different phases of some one underlying pathological pro-

cess. You will remember that the cardinal symptoms of the two disorders were as follows:

MANIA

EXALTATION

ACCELERATED FLOW OF THOUGHT

(FLIGHT OF IDEAS)

MOTOR EXCITEMENT

MELANCHOLIA

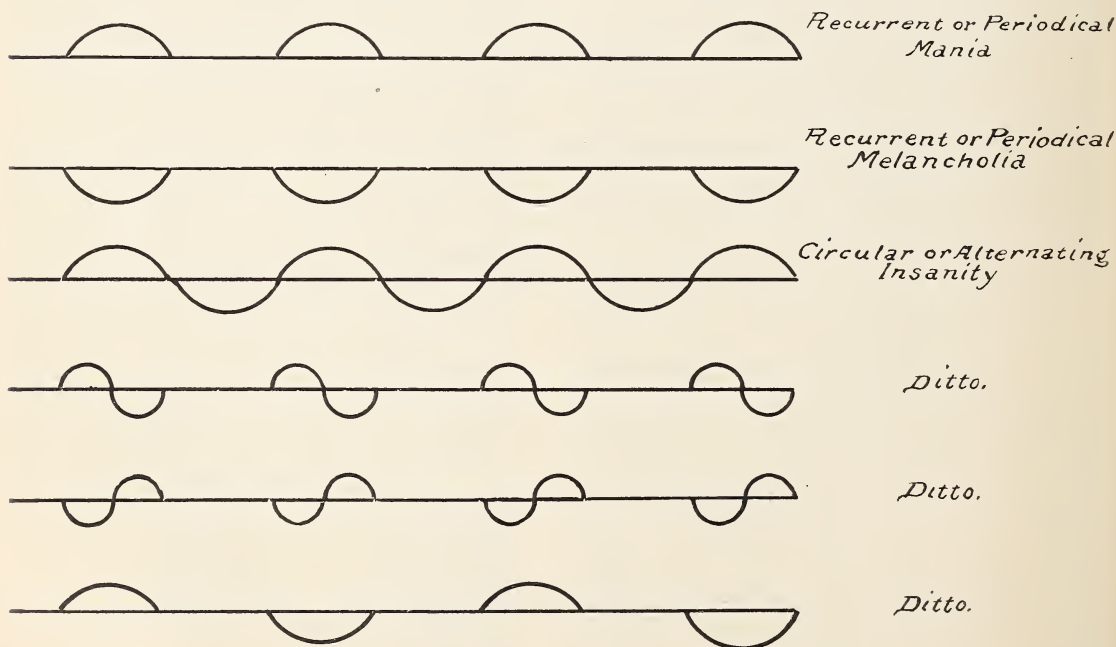
DEPRESSION

RETARDED FLOW OF THOUGHT

MOTOR INHIBITION

(STUPOR)

You will recall, too, that we had long known a singular disorder under the name of circular insanity or alternating insanity, which was characterized by alternations of mania and melancholia, sometimes with and sometimes without lucid intervals. To illustrate by curves representing exaltation and depression above and below a normal emotional level we were familiar with the following variations:



Now it was found by a more thorough clinical study of our patients over long periods of years, including the past history before admission and the history subsequent to discharge from the asylums, that single attacks of mania or melancholia were among the greatest rarities, that recurrence of attacks is the rule, and that the circular or

alternating type is far more common than we used to believe. But a more interesting point still brought out by this more careful investigation of the clinical symptoms was that there are many cases in which some of the antagonistic symptoms described above are combined in the same patient at the same time. Such cases are neither pure

mania nor pure melancholia, but a mixture of the two. For instance, *exaltation* and *motor inhibition* are the symptoms in a type known as manic stupor. *Motor excitement*, *flight of ideas* and *depression* are the manifestations in the type called agitated depression. *Motor excitement*, *exaltation* and *retarded flow of thought* are the curious mixture in the type of insanity denominated unproductive mania. All these facts taken together seem an unanswerable argument in favor of the new designation, manic-depressive insanity. The prognosis as regards single attacks is good, but bad as to recurrence and complete cure.

The other term, dementia præcox, is perhaps not as successful a conception in nosology, and it is clearly unfortunate in its etymological make-up. But it is a phrase that has come to stay during our lifetime at least, and we must make the best of it. Dementia præcox is a kind of waste-basket into which we put many mental diseases that are not easily placed among such clear-cut syndromes as manic-depressive insanity, general paresis, the senile psychoses and paranoia. Into that waste-basket we have thrown all the psychoses of young people, that we used to know as primary dementia, masturbational insanity and insanity of adolescence; the cases of Katatonia which we formerly classed as melancholia with catalepsy; all old-time, chronic maniacs with their delusions of being kings, queens, potentates, etc., and the chronic melancholiacs with their delusions of being followed and persecuted, together with most of the cases of puerperal insanity and insanity of the menopause. It is practically of great importance that the general practitioner should be familiar with the symptoms of dementia præcox, because the prognosis is very bad. Very few cases recover. It is a dementing psychosis, *i. e.*, a psychosis in which the cardinal symptom is a progressive weakening of the mind. But it has a vast array of symptoms, and if I attempt to give a definition of the disorder you will understand why I say that it is not as clear-cut an entity as some of the other types of mental disease, like general paresis and paranoia, and why I intimate that it is not a permanent designation, but will ultimately give way to several other terms when we have learned more of the pathology of insanity. Here is the definition: Dementia præcox is a disease beginning usually in early life, and characterized by a more or less marked and peculiar enfeeblement of mind but manifesting upon

this basis a considerable variety of symptoms, such as emotional indifference, weakness of judgment, flight of ideas, verbigeration, automatic obedience, catalepsy, echopraxis, stereotypy, negativism, mutism, impulsive actions, affectations, grimaces, unemotional laughter, delusions of depressed or grandiose nature and hallucinations.

Now I feel that you are mystified and confused by such a catalogue of symptoms in which there are introduced many terms that I am sure are somewhat new and unfamiliar to you. I question whether I ought to fatigue you by attempting to define them, but I must try to give you some sort of clinical picture of the disease by an analysis of the definition. First, then, it is a disease chiefly of early life. Sixty per cent. of the cases begin before the age of twenty-five years. Then I said "characterized by a marked and *peculiar* enfeeblement of the mind." It is not an equal weakening of all the mental faculties, but a selective deterioration. In the terminal stages the deterioration is general. But at first and sometimes for years we find the most noteworthy symptom to be *emotional enfeeblement*. Now in mania there is emotional exaltation, in melancholia emotional depression, and in dementia præcox emotional failure. This emotional failure is shown in loss of interest, loss of power of attention and general indifference. With this there is also weakening of judgment. On the other hand, the memory is unaffected, the perception of external impressions is unimpaired, and orientation is undisturbed. No matter how dull and stupid he may appear, the patient notes what is going on, remembers well what happens, and knows where he is and recognizes his friends and relatives. Three types of dementia præcox are recognized—the hebephrenic, katatonic and paranoid. The hebephrenic type is a simple progressive enfeeblement of the mind such as we have just described. The katatonic form is distinguished by the presence in addition of stupor or excitement, with negativism, stereotypy and suggestibility. Negativism is resistance to everything to dressing, feeding, answering questions, to passive movements, and includes, of course, mutism. Stereotypy is the constant repetition of stereotyped words and phrases or of stereotyped movements, grimaces, etc. Suggestibility is automatic obedience. When you place the patient in any conceivable attitude he remains there. He is cataleptic and with that form known as *flexibilitas cerea* or waxy flexibility. Whatever you say to him,

question or command, he simply echoes exactly what you say (echolalia), or he may imitate exactly what you do, your attitude or movements (echopraxis).

The paranoid type is characterized by a rapidly developing mental weakness and the presence of marked hallucinations of the senses and paranoid species of delusions.

Now let me turn from dementia præcox, a further consideration of which, without clinical demonstration, can only be a tax to you, to a consideration of paranoid delusions. You have doubtless noticed in the classification I have given you the rather frequent term paranoid—paranoid dementia præcox, paranoid conditions and paranoia. We classify delusions into paranoid, grandiose, depressed and hypochondriacal with some subdivisions under these. But the paranoid are the most interesting. The mildest of these are the so-called derogatory ideas, which may concern the individual's physical, mental, sexual or legal relations. These are very common, and are found among psychopaths, feeble-minded, hysterics, epileptics and ordinary paranoiacs. Such patients believe themselves to be everywhere looked down upon, badly used, neglected, snubbed, displaced, unrecognized. A second and more important group of paranoid delusions—the so-called delusions of reference. The patient refers the words and looks of others, as well as speeches, gestures and newspaper articles, not at all intended for him, to himself. These delusions of reference are typical of beginning paranoia, of paranoid dementia præcox, and other paranoid conditions, such as acute alcoholism, and drug psychoses and some epileptic states. The delusion of being watched or observed is akin to these delusions of reference. But the so-called persecutory ideas are the most important among the paranoid delusions. They are found in many forms of insanity at times, such as dementia præcox, acute and chronic alcoholism, senile dementia, general paresis, and in epileptic and hysterical insanities, but they form the cardinal symptom of true paranoia. They are apt to be fleeting, transitory, unsystematized in all the other psychoses, but in true paranoia they are fixed, systematized and highly elaborated. Persecutory ideas include all sorts of delusions of being followed, conspired against, persecuted by electricity, the telephone and vapors, of being chloroformed, hypnotized, poisoned, incriminated, defrauded, attacked and ruined. The persecutory delusions of other psychoses are like a newspaper sketch, but those of paranoia

are like a romance or three-volume novel. Paranoia is a progressive psychosis founded on a hereditary basis, and characterized by an early hypochondriacal stage, followed by a stage of elaborated delusions of persecution which are later transformed into systematized delusions of grandeur. Hallucinations, especially of hearing, are often present, but the cardinal symptom is a fixed and elaborated delusional system.

Now this psychosis has much interest for the general practitioner and indeed for everyone. To the rudimentary or undeveloped types of paranoia belong many queer and eccentric individuals that we call cranks, and whom the Italians call *mattoids*. Under paranoia we may rank many curious and interesting personalities, such as the litigationists, pseudo-inventors, half-baked reformers, founders of strange and new religions, false prophets, and some of the religious healers often exploited by the newspapers. Many paranoiacs are distinguished in sacred and profane history, the numerous false prophets or Mahdis of the desert, several of whom are described in Irving's *Life of Mahomet*; Johanna Southcott, John of Leyden, John Thom of Canterbury, Guiteau, and possibly John Brown. Benvenuto Cellini, who immortalized himself in his autobiography, has been placed in this catalogue.

I cannot better illustrate this type of insanity than by submitting to you the autobiography of a paranoiac who was for years in the Poughkeepsie Asylum where I was stationed for several years. He was homicidal, and also a man of unusual mental powers, as many such patients are. He was a good Latin and German scholar and he learned Welsh from an attendant while in the asylum. This beautifully written manuscript of 400 pages is a remarkable dissection of his mind, as well as a most excellent description of the progressive elaboration of his psychosis. It also possesses great literary merit. He depicts perfectly the three periods of paranoia, that of hypochondriasis or subjective analysis, that of persecution or delusional explication, and that of grandeur or transformation of personality. He called the book "*The Piling of Tophet*" because of the sufferings he had to undergo. To show his own insight into his condition, which, by the way, is not infrequent in insanity, he says in his preface:

"This work is given to the public as a lunatic's defense of his position." And again in the introduction:

"I am not only a lunatic, but one of the

class of lunatics having a controversy with the world in general; in other words, possessed with a monomania, or crazy one-sidedly or on a single subject."

Monomania was the old designation of paranoia. The following extracts, taken here and there in the early chapters, describe the hypochondriacal or subjective analytic period very well:

"I was always a shy, retiring child, one of the sad and silent sort from the first." "I remember having at times impressions which must be identical with what I have lately heard others speak of as 'double memory.' The feeling would all at once creep over me that the very thing I was present with, my ideas and perceptions at that time, had happened to me once before in just the same sequence and arrangement. I have heard this explained as due to a lack of simultaneity in the action of the two lobes of the brain, the tardy one remembering what had already passed through the other. My own theory was different. I only went so far as to look at it as a mistaken quality in the perception—an erroneous attaching of the nature of the act of remembering to what was really the act of thinking in the present."

"I was very early in life an observer of my own mental peculiarities to a degree which I think must be a very rare exception. If I could compound a boy of my own I should try to improve on the model I remember to have exhibited in myself."

During adolescence he had a fever, and says: "In that transitory strength given by the fever coursing through my veins, I now saw the man I ought to have become rising up like a shadowy phantom in judgment on the wreck which I really was. I felt my deficiencies most keenly every time I met a human being face to face.. I strongly disliked many things I noticed in the manner and words of some I met. I was terribly alert and sensitive to all kinds of snubs and sneers, and oblique remarks in general."

"I was being carried into a state of secret enmity to mankind in general by the prevailing tenor of my brooding meditations. I was in such a towering state of morbid sensitiveness that a slight tinge of impertinence, brusqueness, a fancied contemptuousness in the manner of those I met, put me on the rack at once. Such was my mental state on the eve of my being overtaken by a more marvelously awful fate than ever fell to the lot of mortal man. It became evident to me that I was hearing my

own thoughts given expression to by foreign wills and voices."

"An English physician was the first to form a perfect communication with the inducted brain and he had drawn off my entire memory back to childhood, and had delivered it verbally in the presence of reporters who had taken it down. It was stated that the record was preserved in a number of thick volumes. After the whole earth had become permeated with the magnetism of my head, it would be felt as long as I lived, and the instant of my death would thus be signalled all over the globe, and would be noted and used by all nations as a new era from which to reckon time."

As the delusions burgeoned one from the other and grew more and more elaborate and systematized he wrote toward the close of his stay at the asylum: "The signs are too many and too evident to permit me to doubt that my destiny is bound up with the religion of the world."

The rest of the book is given up to psychological and religious discussion of great interest from our standpoint. He had gradually become a prophet, and the expounder and propagator of a new religion.

Even from these brief extracts you are enabled to recognize the three stages or cycles of paranoia, to see how the hypochondriacal self-analysis grown into a persecutory explication, and this into a transformation of personality. The extraordinary persecution leads by a logical process to the idea that he must be an extraordinary being. These extracts show also the wonderful elaboration of the delusional system, which is the diagnostic feature.

Aside from the four great types of real *acquired* insanity that I have referred to—manic-depressive insanity, dementia præcox, general paresis and paranoia—there is a group of *congenital* mental disorders with which the general practitioner is constantly brought into contact. I do not call attention simply to the cases of idiocy, imbecility and feeble-mindedness with which you are bound to be familiar, but to a peculiar class just above the feeble-minded, that we often call superior degenerates. This term comprises all those borderland cases that show from earliest childhood a deviation from the normal type, that present a disharmony or lack of equilibrium among their mental faculties. They are disequilibrates. To this group should be added doubtless the rudimentary paranoiacs already mentioned. But the class is far larger than this. These cases are found everywhere in our social

organization. The disequilibrium may show itself in unusual talents associated with great weaknesses of one kind or another. We meet with it constantly in literature, art, politics and religion, and the disequilibrates help to fill our prisons, hospitals and asylums. The superior degenerate may be relegated to four groups, viz., constitutional depression, impulsive mental disorder, sexual psychopathy, and congenital neurasthenia.

Patients with constitutional depression are born incurable pessimists. They have no joy in life, are full of vague apprehensions, hypochondriacal or derogatory ideas, toy with thoughts of suicide, are easily fatigued and exhausted, and at the same time are generally intellectual and even talented.

The impulsive class embraces all those cases who with intact intelligence, emotions and memory, become subject to imperative fears or phobias, imperative ideas, impulses to action. These force themselves upon the consciousness, despite every effort of the will to override or abate them. Such patients have what the French call "delirium with consciousness." Among the familiar types are agoraphobia, claustrophobia, the doubting folly, coprolalia, kleptomania, pyromania and the like. To the sexual psychopaths belong the various sexual perversions.

Constitutional or congenital neurasthenia is chiefly manifested in a marked exhaustibility of the nervous system. Throughout life the patient presents the varying symptoms of ordinary neurasthenia, with strong ego-centric and often hypochondriacal tendencies.

An important point to be borne in mind in reference to these disequilibrates is that so large a proportion are susceptible to alcohol, that very small quantities of alcohol are apt to produce marked toxic effects, and this leads me to another branch of our theme that is important to the general practitioner, viz., pathological drunkenness. It would be a little absurd to say that there is such a thing as *normal* drunkenness. Let us call it rather ordinary drunkenness. You are aware that ordinary intoxication is not considered in this country as an excuse for crime. Crimes committed by intoxicated persons are expiated in the same way as crimes committed by sane criminals. But among the alcoholic psychoses, such as delirium tremens, acute hallucinosis, the Korsakoff or polyneuritic psychosis, chronic alcoholic insanity, and alcoholic paranoia,

we find the state of pathological drunkenness included in some of the Continental countries. Very little if anything has been written about pathological drunkenness in this country, but abroad it has assumed a considerable forensic importance.

Now pathological drunkenness is the type which is found among the superior degenerates just described, as well as among many feeble-minded, imbeciles, epileptics, hysterics, neurasthenics, paralytics and senile patients. It is characterized by peculiar blind motor explosions or impulses to action or by deep emotional depression simulating melancholia, or by strong maniacal outbursts. These conditions are of short duration and are usually followed by deep sleep and more or less amnesia. These symptoms in themselves are diagnostic of the disorder, but additional diagnostic evidence is afforded by pupillary paralysis, and if necessary by subsequent experiment upon the patient as to alcoholic intolerance. That is, the effects of small quantities of disguised alcohol administered to the patient, or prisoner, as the case may be, are carefully observed and noted.

I should like, before closing, to say a few words about the treatment of insanity in general. Of course prophylaxis is a phase that should be constantly before us. The general practitioner has a rare opportunity to spread about him the many facts that bear on this. He can do much to educate the public in regard to the evils of alcohol and the diffusion of syphilis. He is early brought into close relations with degenerate stocks, and may direct the bringing up of nervous children, lay out for them a map of life, that should comprise the most careful physical rather than mental education and development. The family physician should regulate his diet, hours of sleep, outdoor life, exercises, etc. The training should be manual and muscular, rather than intellectual. No school until eight or ten years of age. All nervous stimulants, such as tea, coffee, wines, beer, tobacco, should be interdicted. Cold baths, frictions, exercise, hard beds, cold sleeping rooms, wide open windows at night, develop the body's resistance to external stimuli. For these children country life is imperative, and the occupations chosen for later years should be outdoor and manual, never indoor and mental.

When insanity has actually developed, the cardinal principles of treatment may be epitomized under the terms isolation and psychotherapy. Patients may be isolated in

their own homes in acute conditions, but acute cases requiring bed treatment are relatively rare. The vast majority of cases of insanity are rather subacute, insidious, chronic in their onset. For these isolation means removal from home and family surroundings, either to hospitals and retreats, or if better for the patient, to suitable sanatoria, resorts, hotels, rest-houses, country homes, etc. Sometimes travel and change of scene are advisable. Under the heading psychotherapy are included, not only the influence of sane companionship and conversation with physician and nurses, but all sorts of exercises and occupations. It is an axiom with the psychiatrist that nothing is better in the way of treatment for the disordered mind than physical employment, which improves nutrition, acts as a safety-valve for the escape of surplus energy, distracts the attention and engages the interest of the patient. Unfortunately this system of psychotherapy is not often well carried out. It is better done in the public than in the private asylums, but even here it is inadequate. The habit of keeping only a boarding house for the insane is a hard one to break. The doctors in charge of private retreats are not wholly responsible for the fact that they do so little for their patients beyond feeding, housing and guarding them. It is partly due to long-established custom, partly to therapeutic pessimism and partly to the stand taken by the patient's relatives who are not educated to the occupation idea. When you next visit an asylum, public or private, you will be able to judge of the progressiveness of the institution by inquiring into the kind of medical histories taken, by looking in at the laboratory, and, above all, by observing what the patients themselves are doing.

And now, in closing, and in thanking you for your kind attention, I must ask your indulgence for the somewhat desultory character of this talk, but you will understand that in the consideration of a vast subject like this, it is only possible to touch briefly here and there upon points that are new or of general interest. If I have succeeded in planting a suggestion or two in your minds for subsequent development into some idea helpful to a good cause I shall be grateful and satisfied.

The only evidence of an acute intussusception may be the passage of a small amount of blood per rectum. One should always make a thorough rectal examination as even an intussusception high up in the small intestine may sometimes be felt per rectum.

FRACTURE OF THE HEAD OF RADIUS WITH REPORT OF TWO CASES.*

By Charles F. Baker, M. D., Newark.

I consider that there is sufficient justification in presenting this paper concerning a fracture which, though considered infrequent, from the fact that several have come under my notice which had not been diagnosed or properly treated as a consequence. I remember to have seen at least six cases, but shall report two, which I have treated privately.

History—The first case reported is said to have been in 1834, but in this case the fracture was only noted at autopsy. In 1880 Bruns collected only twenty-one cases and in 1905 Thomas, of Philadelphia, only found forty-eight, but in skiagraphic collections in Philadelphia since has unearthed fifty-five more.

Scudder, Gray and Tillman all describe the fracture, though not at great length. Dr. T. Turner Thomas, of Philadelphia, in the *Annals of Surgery* for August last, published an article which includes this and other fractures in the vicinity, giving among other useful information a note on the difficulties in the way of skiagraphing these fractures and the reasons that some of them go unrecognized, even after being X-Rayed.

Etiology—The causes of most of these fractures is either direct violence applied over the head and neck of the radius or indirect violence, owing to a fall on the hand in the pronated position.

Symptoms—The leading symptoms are swelling over the head and neck of the radius (in new cases), limitation of supination and pronation with pain and muscular spasm. In those cases caused by direct violence there may occur comminution of the fragments and rupture of the orbicular ligament. Such cases hardly go unrecognized and do not come within the scope of this paper, which is to deal with the more simple fractures with little or no displacement.

The fracture which occurs after a fall forward with the hand in the prone position consists generally of a cracking off of the anterior third of the head of the radius without apparent displacement or rupture of the orbicular ligament. There are present all of the above symptoms, with the exception possibly of crepitus, and this may be felt during a preliminary examination

*Read at the Doctors' Club, Newark, Feb. 5, 1908.

and not when a second attempt is made to assure ourselves of its presence. I consider this probably due to the fact that the fragments may be moved into very accurate approximation and held in place by the orbicular ligament surrounding them.

In regard to the skiagraphing of the fractures, I quote from Dr. Thomas' article above mentioned, viz.: "If the fracture is due to a fall forward on the hand, and most of them probably are, then we note that at the moment of impact the fragment is anterior and that the forearm is in pronation since in all positions with the elbow in extension, *only* the anterior part of the radial head is in contact with the external condyle, and in a fall forward on the hand the forearm is in extension and pronation. With the forearm in this position therefore in a lateral exposure the rays should pass almost directly in the line of fracture."

In both cases reported by me the first radiographs made in the antero-posterior position failed to show the fracture, hence I can endorse what Dr. Thomas says as

being very important, especially when the diagnosis is in doubt, or where the fracture is an old one and the patient only asks for treatment because of a persistent stiff joint.

Course—Union generally occurs after proper treatment in four weeks, and the limitation of motion in a few more.

Diagnosis—The diagnosis is made first by exclusion of all other fractures in the neighborhood, viz., those of the shaft of the radius or ulna and of the humerus within the joint, with the appearance of the above symptoms, limitation of all movements and particularly of supination and pronation. Crepitus if present is never marked. Localized extreme tenderness is always marked in new cases. Lastly, skiagraphy as an aid. In old cases, marked limitation of extension, flexion and rotation persist.

Treatment—As this fracture is a simple one and the fragments are so apt to be held in place by the orbicular ligament, the treatment consists of immobilization, with passive motion after the first week.



CASE I.

CASE I.

An Englishman, aged forty, was injured by the falling of a scaffold on which he was at work laying bricks, precipitating him to the ground, a distance of about eighteen feet. He does not know how he landed, being temporarily unconscious, but as there were no contusions visible on the forearm, I am inclined to think this fracture was one of indirect and not direct violence. He was sent to a hospital, where contusions of the head and back were dressed, when he was discharged and allowed to walk home. Answering his complaint regarding the injury to the elbow, the arm was examined but only a diagnosis of contusion made and patient told that the arm would be all right in a few days. On arriving home the pain at the elbow was so intense that the patient decided to call a physician.

On examination, I found numerous contusions of the face and back; the patient lay partly on his side, holding on to the right arm with the left, to prevent the slightest motion at the elbow joint. After excluding other fractures about the joint, my attention was called to a point of extreme tenderness over the head of the radius very accurately localized by the patient. Rotation was very painful, flexion and extension painful and limited by muscle spasm, crepitus was present but not marked.

I encased the elbow in a temporary dressing made of newspapers used as a right-angle splint bound about the arm with adhesive plaster and on the following day replaced it with a flexible wire splint. Splinting relieved the pain at once.

The joint was allowed to keep this angle of ninety degrees for a few days, but thereafter the angle was changed every second day for the rest of four weeks, passive motion being practiced at each change of dressing. In spite of the early passive motion and the persistence with which it was applied, flexion and extension of the joint remained limited for over eight weeks, which is quite characteristic of this fracture. In addition to the passive motion practiced at my office, at the patient's home much was done after the fourth week, for I had his entire coöperation. His room-mate would forcibly flex and extend the arm, and the patient would carry heavy weights to overcome the muscular difficulty. The patient was at work after the sixth week laying bricks, but called every third day, when I would forcibly but gently extend his forearm to the normal limit.

CASE II.

A Scotchman, aged 30; occupation, iron molder. History of accident and injury to the arm while playing football four months previously. A physician sent by patient's lodge had examined the arm at the time the injury was fresh, and recommended rubbing with a liniment. No diagnosis by him of fracture had been made. The patient was told by this same physician a month later that as the arm had not improved up to that time, it would never be any straighter.

There was an effusion into the joint which appeared evident by a general swelling about the joint, especially marked on either side of the olecranon; also limitation of motion in all directions, heat and redness. The effusion, heat and redness I think were probably due to overwork of the part, as the patient had up to that time tried to continue his occupation of iron molder, which necessitated very hard usage of the elbow joint, in pounding the sand with a heavy metal tamp. On the first examination a diagnosis of traumatic, possibly tubercular synovitis, was made. A radiograph was taken, which did not show a fracture, not having been taken in an attitude which would allow the rays to pass between the fragments, but a cloudiness was present which only further misled. I placed the arm in a plaster bandage tentatively for two weeks, at the end of which time the swelling, pain and redness had disappeared. Another plaster bandage was applied for two weeks, after which there was further improvement, except in the motions of flexion and extension. A plain dressing was applied and high frequency electricity applied for the pain which again presented itself on leaving off the support. Passive motion was employed in spite of the pain, but as this latter symptom persisted another radiograph was made in a different position when the fracture was detected. In the meanwhile the patient had attempted, against my advice, to work, when the arm became worse, and the effusion returned. The symptoms were now recognized as due to an unhealed fracture and the proper treatment carried out, namely, immobilization, with passive motion only to the limit of pain, until sufficient time had elapsed for union to occur. There was no further trouble with it excepting the persistence of limitation of flexion and extension.

Bleeding after coitus is sometimes the earliest sign of cancer of the cervix.

THE SURGICAL TREATMENT OF EXOPHTHALMIC GOITRE.

By Aimé Paul Heineck, M. D., Chicago, Ill.

Adjunct Professor of Surgery, College of Physicians and Surgeons; Surgeon to the Cook County Hospital.

A critical analysis of the voluminous literature of the subject has convinced me that the following conclusions are justified:

1. Thyroid gland substance, or any of its preparations, should never be administered in the treatment of exophthalmic goitre. Their use in that disease is irrational, and it is almost invariably attended by an aggravation of symptoms. Their use invariably increases the dangers of operative interference.

2. As a therapeutic agent in the treatment of exophthalmic goitre, thymus gland substance and its various preparations are useless. Their use is, at times, attended by an aggravation of symptoms. They can not be considered curative agents.

3. Parathyroid extract as a curative agent of exophthalmic goitre has no efficacy. MacCallum says that the alterations noticed in the glandulæ parathyroidæ do not seem to be constant or sufficiently extensive to support the idea that the parathyroids have anything to do with the development of the disease known as exophthalmic goitre.

4. The medical treatment of the disease which we are considering is, the use of belladonna being excepted, in reality largely symptomatic. For the anæmia, arsenic has been given; for the nervousness and restlessness, the bromides; for the tachycardia, digitalis, sthrophanthus, etc. All these agents are palliative, not one has ever proven to be curative.

5. All symptoms of medical treatment of this affection, be they hygienic, dietetic, medicinal, organotherapeutic or electrical in nature, are unsatisfactory, are disappointing. Their comparative powerlessness has induced surgical endeavors to cure the disease. There is not any form of medical treatment which has been successful with sufficient frequency to carry conviction of its worth.

6. Serum therapy (see foot note*) of exophthalmic goitre is as yet in an experimental state. The results attending the use of "thyroidectin" are not invariably satisfactory. Miller, Quine, Billings and others have had failures attending its employment. Its use is not devoid of dangers.

7. It is now demonstrated a fact that all operative measures which tend to lessen the secretory activity of the thyroid gland, or to diminish the amount of thyroid gland tissue present in the organism, are of value in the treatment of exophthalmic goitre. That method must be chosen which at the time seems to be the least dangerous without sacrificing chances of success.

(a) Intra-glandular injections are unsafe in exophthalmic goitre. There is the danger of sepsis, of injecting the irritant agent into the blood vessels, of provoking alarming hemorrhage (alarming through the compression that it may exert upon the respiratory passages).

(b) The ligation of the thyroïdal arteries in this disease was first recommended in 1886 by Woffler. It has been practised by operators of such eminence as Roux, Rydigier, Kocher, etc. It is now used only as a preliminary, or as an accessory, step to partial thyroidectomy. The ligation of the four thyroid arteries is liable to determine gangrene of the thyroid gland, is liable to induce thyroid insufficiency. The objections to ligation of two or three of the thyroid arteries as a routine treatment of exophthalmic goitre are the following:

1. It is a procedure often difficult of execution, the hypertrophied thyroid gland having altered the anatomical relations of the part; the infiltration of the tissues also adds to the technical difficulties. The ligation of the vessels is especially difficult in the retro-clavicular and retro-sternal varieties of goitre.

2. Owing to the greatly increased vascularity of the organ, branches of the thyroid arteries are liable to be mistaken for the trunks of the vessels.

3. It does not secure as complete nor as permanent mitigation of the symptoms as partial thyroidectomy, and it is, we believe, equally difficult to perform. Ligation of the inferior thyroids is just about as serious a matter as thyroidectomy. Dressman states that improvement is slower after ligation of the vessels than after operative treatment on the gland.

(c) Exothyropexy for exophthalmic goitre has been performed with varying results. This operation has been termed "an unfinished partial thyroidectomy."

* By serum therapy is meant the employment of either (a) the serum of thyroidectomized animals, or (b) the serum of animals treated with increasing doses of thyroid extract, or (c) milk in the dried or liquid form, of thyroidectomized goats. With the use of these different sera, authors report failures and successes.

(d) In the absence of accessory or aberrant thyroid bodies, total thyroidectomy is very liable to be followed by cachexia strumapriiva. This explains why the operation is no longer performed by those that know. Kocher reports seventy per cent. of cachexia strumapriiva in thirty-four cases of total excision of the thyroid gland. Post-operative myxœdema can always be controlled by the administration of thyroid extract.

(e) Partial thyroidectomy is as yet the most satisfactory operation for performance in all cases of exophthalmic goitre, be they primary or secondary in type. Kocher, as a result of his enormous experience, believes that we can say that partial thyroidectomy can be performed without danger provided the heart is sound, careful hæmostasis is obtained and the wound drained. In cases that survive the operation, it is invariably attended by marked alleviation of symptoms, in many instances by complete and permanent cure. Kocher is of the opinion that partial resection and ligation of the vessels is the most rational procedure. He first ligates the two superior thyroid arteries. This, in his opinion, is easy of execution and makes the subsequent work easier. He then ligates one inferior thyroid artery before extirpating the gland. No more thyroid tissue need be left in situ than is present in the normal organism, that is from 30 to 60 grammes. The surgeons that have, for the cure of this disease, removed the largest quantity of thyroid tissue short of its entirety, are those that have obtained the very best results, both from the standpoint of the number of recoveries as well as from the standpoint of completeness of recoveries. If not enough gland tissue is removed, the maximal benefits are not derived from the operation. If too much is removed, thyroid insufficiency may develop. A small amount of glandular tissue is all that is required to maintain the ordinary nutrition of the body. When the thyroid gland is not totally removed, the possibility of post-operative myxœdema can be said not to exist. Kocher met it only once in 1000 operations for goitre. In this case he removed half the gland, the remaining half atrophied. The symptoms disappeared following the administration of thyroid extract.

8. The secondary forms of exophthalmic goitre, when subjected to partial thyroidectomy, almost invariably recover from the operation and from the disease.

9. Operators disagree as to the most suitable anæsthesia for these cases. All the anæsthetic agents have their partisans. Fa-

talities have occurred with all of them. Local anæsthetics have the disadvantage of not completely abolishing the perception of pain. General anæsthetics have the disadvantage of increasing the cardiac insufficiency, and of frequently being followed by cough which may induce secondary hemorrhage, by vomiting that may soil and infect the dressings on the wound. Kocher recommends local anæsthesia, he never operates on singers for goitre under general anæsthesia. The Mayos (Rochester, Minn.) employ general ether anæsthesia in almost all their cases. Kummell uses oxygen-chloroform. Kurt, Schulze and Riedel have seen an acute bronchitis follow operations for exophthalmic goitre in which only local anæsthesia had been employed. Ries (Chicago) employs scopolamine-morphine anæsthesia. According to Prof. Fenger, the degeneration of the heart muscle will account for some of the sudden deaths; while the absorption of thyroid, shock, anemia and general nerve exhaustion will account for most of the other deaths that are not due to the anæsthetic.

10. The dangers of partial thyroidectomy in exophthalmic goitre are either avoidable, such as infection and hemorrhage, or unavoidable, such as "acute thyroidism." This latter, also called "thyroid fever," is liable to occur after the observance of all precautions now known to us. We do not yet know how to prevent nor how to cure "acute thyroidism." It is not always fatal. Free drainage of the operative wound is our most serviceable weapon for combatting the complication. The nature of the anæsthetic, and that of the operation, seem to have little influence in its production. All Basedow patients seem very sensitive to surgical operations.

11. There is no doubt that the mortality is greater in bad cases than when the symptoms are slighter and the patient in better condition. Early operations give the best results. They give a lower percentage of deaths and a very much higher percentage of cures. Exophthalmic goitre tends to diminish vital resistance and to exhaust the nerve centers, hence operate before the patient's vitality has been lowered by chronic thyroid intoxication. Kocher lays great stress on the avoidance of the development in all cases of goitre of what he calls the "thyroid heart." This, he asserts, can be acquired either by waiting too long for surgical intervention, or by an excessive iodine or thyroid extract therapy. He assures us that the prognosis in Basedow's disease will

be much better in the future, if the operation is done early.

12. Operative points:

(a) It is well to prepare patients for some time, to observe them and to better estimate their ability to withstand operation.

(b) Place the patient in the inverted (reversed Trendelenburg) position. Put a round pillow beneath neck so as to give better access to goitre. Maintain neck in that position which interferes least with respiration. The most rigid aseptic precautions should be observed to avoid infections, mediastinitis, deep phlegmon of neck, thrombo phlebitis, septicemia, etc.

(c) Kocher's transverse convex incision allows of a complete exposure of both lobes. From a cosmetic standpoint, it is the best, as the usual neckwear will hide the scar. If it is necessary to make a section of the sterno-hyoid and sterno-thyroid, the Mayos advise that this be high, so as to preserve the nerve supply to these structures. After removal of the tumor, divided muscular structures must be sutured. After completion of operation, cutaneous wound must be sutured accurately. Drain through an opening made below this wound.

(d) Hemostasis must be perfect. Do not depend on temporary compression to arrest the bleeding. It is deceptive. When possible tie the bleeding vessels—it is preferable to leaving clamps in position. Clamps interfere with the healing of the wound. Nurses should be instructed to watch for first symptoms of secondary hemorrhage.

(e) Tissue should be left at the poles of the gland, preferably about the inferior thyroid arteries, so as to reduce the risk of injuring the recurrent laryngeal nerves.

(f) Drainage is of utmost importance:

1. To remove what primary wound secretion is present. Although at the time of operation the bleeding may be stopped absolutely there is always considerable oozing afterwards into the large cavity of the neck which it is impossible to obliterate by sponge pressure. This clot may cause interference with union, may cause pressure upon the trachea.

2. To remove what contents of the gland have been expressed into the wound during the operation. A certain amount of the toxic secretion of the gland being allowed to accumulate slowly in a wound that is closed will often cause such symptoms as may prove fatal in an otherwise successful case.

(g) Swab mucus away from throat. There is always a hypersecretion of mucus giving rise to troublesome coughing. This

is one of the reasons why the bleeding points should be well secured for avoidance of secondary hemorrhage.

(h) Keep patient physically, mentally and emotionally quiet.

13. Recovery from all symptoms is neither immediate nor simultaneous. The first symptom to subside is the tachycardia. The tremor and the nervous and psychical symptoms also disappear quickly. The total disappearance of menstrual disturbance is of good prognostic omen. It takes months for the entire beneficence of the operation to become manifest. The exophthalmia is the last symptom to disappear. Albert Kocher says that a total disappearance of exophthalmos can only be expected in those cases in which the operation is performed early. Eye symptoms disappear in the majority of cases quickly and completely, irrespective of persistence or disappearance of exophthalmos. The longer the period of observation after the operation, the better appear the results.

14. When, after a partial thyroidectomy, the symptoms recur, the recurrence is most frequently associated with a hypertrophy of the remaining portion of the gland. Removal of a portion of this will bring about a cure.

15. Partial thyroidectomy is indicated:

(1) In all cases of secondary exophthalmic goitre:

(2) In all cases of primary exophthalmic goitre.

(a) When, after three months of well-conducted appropriate medical treatment, the patient's condition is not markedly improved.

(b) When the goitre compresses or distorts the trachea, or the oesophagus, or both. Long continued dyspnoea is very liable to beget pulmonary emphysema.

(c) When tachycardia is marked. Long continued and excessive tachycardia is very liable to beget organic heart changes.

(d) When exophthalmos is so marked as to prevent complete closure of the lids during sleep. Kocher and others report cases where patients lost their eyesight through ulceration of the cornea secondary to marked exophthalmos.

(e) If the patient is losing strength.

(f) In all acute cases that seem like a sudden intoxication of the body by thyroid, even when no marked enlargement of the thyroid body can be demonstrated.

16. Surgical treatment of exophthalmic goitre is justified by theory and by facts.

872 S. Trumbull Ave., Chicago, Ill.

STATEMENT ON THE MEDICAL ADMINISTRATION OF THE GENERAL MUNICIPAL HOSPITALS OF MANHATTAN AND THE BRONX WITH SUGGESTIONS.

(Exclusive of the Metropolitan Hospital.)

By a Special Committee of the Charity Organization Society to the Mayor's Hospital Commission.*

PRESENT CONDITIONS.

In the municipal, as in many of the private hospitals of New York city, a system of medical administration exists which is unknown outside of this country, and which the leading American hospital—the Johns Hopkins Hospital—has absolutely abandoned. The officers of medical administration are—First, an attending staff; second, an assistant attending staff; third, a house staff. In addition, there exists in Bellevue and City Hospitals a separately organized pathological department administered on an entirely different system from the rest of the hospital, with a paid director and assistants who give their whole time to the service of the institution.

THE ATTENDING STAFF.—The attending staff of our municipal hospitals varies in size without definite relation to the size of the service. The physicians and surgeons serve without pay; their period of service is never but a portion of the year—usually three or four months, several physicians or surgeons rotating in the same wards during the course of the year. In the hospitals with active service they visit daily, or send their assistants. At City Hospital, with more chronic service, they visit two or three times a week. They exercise little or no supervision over the economic side of hospital administration. They direct the treatment of the patients through the house staff, and leave, almost invariably, all other matters of medical administration to the discretion of the house staff alone. They are actively engaged in practice outside of the hospital and must earn their livelihood by it. As their term of active service is short, many of the best of them are also attending physicians or surgeons to one or more of the large private hospitals, supplementing their opportunities for study in this way. In

Bellevue Hospital, and to a certain extent in the other hospitals, they are teachers of medicine—but much of their teaching must be done outside of the hospital.

MEDICAL BOARD.—The Medical Board, made up of the attending physicians and surgeons of the hospital, meets monthly and through committees carries on the general administration of the hospital as a whole—the discipline of the staff, the examination of candidates for the staff, and similar functions. It also submits nominations for vacancies in its own membership to the trustees of Bellevue and allied hospitals, or the Commissioner of Charities.

ASSISTANT ATTENDING STAFF.—The assistant attending staff varies greatly in different institutions. It is large in Bellevue Hospital, where much teaching is carried on, and there has certain definite duties apart from those of the attending physicians; in the other hospitals the assistants act merely as substitutes for the attending physicians and surgeons in case of absence. In none of the hospitals do the assistants serve except for a portion of the year, and they have still less connection with the general administration of the hospital than the attending physicians and surgeons.

HOUSE STAFF.—The house staff is made up of recent graduates in medicine who serve eighteen months or two years without pay, in a graded service, during the last six months of which, as house physician or surgeon, they exercise the only real and continuous authority that there is in the medical administration. They are residents in the hospital. They accompany the attending physician or surgeon upon his rounds, or assist him at operations, and during the rest of the time are solely responsible for the medical or surgical care of the patients. Their work is very arduous, since upon them falls practically all the administrative work that is carried on, the care of the instruments and apparatus, the making of requisitions, the transfer and discharge of patients, the care of the records, etc. In hospitals with an active ambulance service this must be added to their work during a period of six months or a year.

The accompanying table shows the relationship of attending and assistant attending staff and house staff to each other and to the number of patients in the hospitals under consideration for the year 1906. The Metropolitan Hospital has not been included in this study because appointments in it are given solely to members of the Homeopathic school.

*The committee consisted of Drs. S. F. Hallock and T. C. Janeway, Messrs. Homer Folks, and Edw. T. Devine. The report was presented by Dr. Janeway.

1906	Bellevue	Gouverneur	Harlem	Fordham	City
Total patients per year,	18,199	2,251	2,321	973	6,232
Average patients per day,	804	69	46	50	633
Ratio discharges to patients,	1-16	1-11	1-7.2	1-18.5	1-37
House Staff,	46	8	7	4	24
Ratio Staff to total patients,	1-395	1-281	1-331	1-243	1-260
“ “ “ average patients,	1-17 $\frac{1}{4}$	1-8 $\frac{5}{8}$	1-6 $\frac{4}{7}$	1-12 $\frac{1}{2}$	1-26 $\frac{1}{3}$
Attending Staff,	32	12	9	8	32
Ratio Att. to House Staff,	1-1.43	1-0.66	1-0.77	1-0.5	1.075
“ “ “ total patients,	1-568.7	1-187.6	1-257.8	1-121-6	1.194.6
“ “ “ av. patients,	1-25.1	1-5.8	1-5.1	1-6.25	1-19.7
Assistant Attending Staff,	34	3	3	2	10
Ratio Asst. to Attendings,	1-0.94	1-4	1-3	1-4	1-3.2
“ Total Attending Staff, to average patients,	1-12.1	1-4.6	1-3.8	1-5	1-15

PRACTICAL RESULTS OF THE PRESENT METHOD.

First—Unpaid medical men do not and can not be expected to exercise any supervision over the economic side of hospital administration. In consequence, the opportunities for dishonesty and for waste on the part of subordinate employees are unlimited. Two years' experience at the City Hospital, in which a member of the Medical Board, as chairman of the Inspection Committee, at great expense of time, took upon himself the duty of keeping close watch on all requisitions, has demonstrated the extent of the loss which the city sustains in this way.

Second—Physicians and surgeons serving but a few months in each year, and connected with other institutions, do not and can not be expected to maintain any sustained interest in the institution, nor to give its general problems but a small portion of their time and thought.

Third—Attending physicians and surgeons changing every three or four months are absolutely unable to develop any methods of economic administration of their own service, because these will at once be changed by the attending physician who succeeds them.

Fourth—For the same reason they are absolutely unable to do really efficient medical teaching, or to develop the best methods of medical instruction in their services, and they are practically wholly deprived by this system of rotation in office from attempting research into the problems of disease, which shall contribute to the advancement of medical science. Practically all of the progressive work done in our hospitals is done by their pathological departments—in striking contrast to the great amount of new knowledge coming to us every year from the studies carried on in the wards of the great Continental hospitals, or even from the Johns Hopkins Hospital in our own country.

Even the treatment of patients suffers much from these frequent changes.

Fifth—Medical boards, as might be expected, seldom if ever discipline their own members, and almost invariably shield those of their members who are inefficient or neglectful of their duties to the hospital. Large medical boards, as administrative bodies, without other executive than their own committees, can accomplish comparatively little for the improvement of medical administration.

Sixth—The house staff, having continuity of service, and handing down a strong body of tradition from man to man, represents the real medical administration of the hospital, and its standards of work and treatment of the patients can be but little influenced by attending physicians who change frequently, and who spend but a small portion of their time in the hospital.

Seventh—Except in Bellevue Hospital, where constant teaching makes for better supervision, and where the assistant attending staff is large, the medical records of our New York city hospitals are in a disgraceful condition. Those of Bellevue Hospital have only been presentable within a comparatively few years.

THE MODERN CONCEPTION OF A HOSPITAL'S FUNCTIONS.

Hospitals, like other social institutions, are no longer looked upon in enlightened circles as only places where charity shall be done; they are institutions maintained by society for the prevention, cure or relief of disease. In order to accomplish this, they must equally hold before them three co-ordinate ideals:—

1. The attainment of the maximum of efficiency (including economic efficiency) in the care of the sick poor;

2. The providing of the maximum opportunity for medical education compatible with the best care of the patients;

3. The contribution of the largest amount of new medical knowledge through research into the causes and nature of diseases and the treatment of disease, compatible with the best care of the patients.

Under the existing method of hospital administration in New York, the third of these ideals is practically unattainable; the second is realized but partly in Bellevue Hospital, little in any other; the first—if we include economic efficiency—is very far from being realized. The physicians of New York are not less skilful and successful in their private practice than are physicians in other countries; the fault, therefore, lies in the system, and some of the most important defects have been pointed out above. What are the remedies?

The chief reforms needed are clear when we look outside of New York city and appreciate that our hospitals represent a primitive type, out of which, in other countries, the great scientific hospitals of the day have been evolved. Only in the smaller French villages, out of contact with medical education, does the rotating service of physicians still linger in Europe. The pre-eminence of Germany as the teacher of the modern medical world has come in large part from the affiliation of municipal hospitals and universities, for their mutual advantage, which took place there fifty years ago. Two of Germany's greatest clinical teachers, Prof. Friederich Müller, of Munich, and Prof. von Norden, now of Vienna, who have visited New York during the past three years, were amazed at our system, and predicted its speedy abandonment for the good of the hospitals themselves. A famous English consultant expressed his astonishment that our great hospitals seemed to be conducted with a view to the education of nurses at the expense of the physicians. In this country, the Johns Hopkins Hospital has demonstrated the efficiency of the foreign method of organization for twenty years, and holds an undisputed place as the leading American hospital. Dr. Welch and Dr. Osler, again and again, have attributed the success of their institution to the form of organization.

Dr. Barker, who succeeded Dr. Osler as professor of medicine, in an address on this subject in this city two years ago, said, that were he a trustee of a hospital in New York city, he would not rest until he had affiliated that hospital with some medical school and organized it as a teaching institution.

Furthermore, even our New York hospitals have adopted the principle of con-

tinuity of service and a salaried staff in their pathological departments. Yet, not so long ago, pathologists, too, only served a few months each, and were unpaid. The development of scientific work in pathology under the new system is the only redeeming feature of New York's hospitals to-day, but it can go no further until the medical and surgical services are conducted with the same scientific interest. This is especially true in that most important branch of medical investigation to-day, the study of metabolism, which promises the most fruitful results in the treatment and cure of a large group of diseases. Study and treatment of this kind require a degree of organization which shall insure care of the minutest details of diet and supervision of the patients, and a staff quite as well trained as that of a modern operating room. This is absolutely impossible, unless the physician in charge has complete and permanent control of his wards. As a result diseases, of which diabetes is the most frequent, are practically uncared for in any hospital in New York. Even physicians who have specialized in this work are unable to do anything for such patients in their own hospital wards. Had I diabetes to-day I should consider myself far safer outside a hospital, than in any in New York city.

Logically there is no defense for stopping at the pathological departments in this introduction of modern methods. Economically there is far more need for it in the wards, scientifically and educationally there is no less.

What are the essentials of a modern organization?

THE MODERN MEDICAL ORGANIZATION OF A HOSPITAL.

First—Permanent and responsible physicians and surgeons in chief. In order that these may be responsible for the details of hospital administration and give the amount of time necessary (at least one-half of every day) they must be paid well.

Second—Assistant physicians and surgeons serving continuously and responsible to their chiefs, the higher of these assistants not living necessarily within the hospital, the lower of them resident in the hospital; these also paid in proportion.

Third—Voluntary assistants, some, but not all of them necessarily resident within the hospital—to assist in carrying on the routine work for a portion of the patients of each division, under the direction of the chief and his assistants. These men serve

without pay in consideration of the education which they obtain.

Fourth—Medical students in their last year, each assigned a certain number of patients, in the care of whom, and especially the care of the records, and the making of the laboratory examinations, they assist under the direction of the chief and his assistants. They should not live in the hospital, but should spend all day in the wards. They should have no connection with the treatment of the patients, but contribute materially to the efficiency of the hospital in the care of patients through their work in carrying on the complicated diagnostic procedures necessary in modern medicine.

Each medical or surgical division should be a unit, with a staff containing such numbers in each of the three subordinate grades as the character of the service warrants. The best foreign practice now allows one paid assistant to each thirty or forty patients, with voluntary assistants under him. A medical or surgical division should contain at least one hundred beds; in the more chronic hospitals a larger number.

Each chief of division should be held responsible for the administration of his service and the choice of his voluntary assistants, and should have a voice in the appointment of the higher assistants. He should make requisitions on the hospital superintendent for all supplies used in his division, and have authority over the superintendent in the matter of employment and discharge of employees in his wards. He should also make requisition on the superintendent of nurses for such nursing staff as he considered necessary for his wards. Each division should have adequate laboratories of its own for chemical and microscopic work.

WHAT WOULD BE THE ADVANTAGES AND THE DANGERS OF SUCH A SYSTEM IN NEW YORK CITY?

The advantages should be obvious from the considerations above. From the experience of other countries, it seems clear that the State cannot secure the most efficient care of its sick while it is dependent upon medical charity for that care. It is still more clear that it cannot have economical administration of its hospitals until it pays for such administration, and can demand accountability of its medical men. It is equally clear to those who have studied the problem of educating the medical student practically, without harm to the patients of our hospitals, that only by making the student a part of the hospital machinery, where

his observation of disease will be incident to the performance of definite duties for a definite group of patients, and under the guidance of teachers whose hospital work and teaching are their first interest in life, can this be accomplished. Where students are only admitted to the wards in groups, at certain hours of the day, patients must be exhibited as objects of curiosity to a crowd of strangers and must suffer from the exposure and fatigue incident to being examined by a number of students in a short time. This is wholly done away with under the other system. In addition, it is pitiable that New York city, with its unrivalled opportunities for teaching medicine, should have fallen to at least third place as a center of medical education in the United States, and should be conspicuous for the relative paucity of the contributions which its medical men are making to the advance of medical science.

The disadvantages of such a system in New York are mainly bound up with the dangers of political interference in the appointments, and the securing of positions of great power and responsibility by men who will give no more thought to their responsibilities than our hospital physicians do now. Men for such positions must combine executive ability with success as teachers, and skill both as investigators and practitioners of medicine. Our Civil Service examination system, as it exists at present, is most unlikely to rate men according to their possession of such composite abilities. In addition, our universities will scarcely be willing to coöperate in an arrangement which delegates the choice of their professors to a board of Civil Service examiners. Even that, however, would be preferable to the present system, if there could be an ideal examining board, taking into consideration all of a candidate's previous work.

HOW MAY SUCH A SYSTEM BE SAFEGUARDED AND MADE PRACTICAL IN NEW YORK CITY?

First—Leave the Metropolitan Hospital as at present, or bring it into line with the new system, giving the nominating power for chiefs and assistants to the Homeopathic Medical College.

Second—Affiliate Fordham Hospital in the same way with the Fordham University.

Third—Divide the new Bellevue into three divisions, each with a physician in chief, a surgeon in chief, and a chief in each of the special departments planned for

—nominations for which positions shall be made by the president and trustees of Columbia University, the president and trustees of Cornell University and the Chancellor and Council of New York University. In the City Hospital, fill vacancies as they occur alternately upon the nomination of the above universities, the services being as nearly as possible divided between the three. City Hospital could maintain two medical divisions, one surgical division, one obstetrical division, and the several special divisions.

Fourth—Erect a new small city hospital on the West Side of the city, where the ambulance problem is the most serious and a great need for a small hospital exists; then affiliate this new hospital, Harlem Hospital and Gouveneur Hospital, each with one of the three universities named—each hospital to have one chief physician and one chief surgeon.

Fifth—Since these physicians and surgeons would be both serving the city and serving their universities as teachers, divide the salaries between the two. In Bellevue Hospital salaries for the chiefs should be at least \$5,000 a year, \$2,500 to be paid by the city and \$2,500 by the university. In the other hospitals the salaries should be \$2,000 to \$5,000, depending upon the size of the service, to be met in like manner.

Sixth—Have it understood that at least half of the chief's time must be given to the service of the hospital, with specified provision for vacation, during which his first assistant should take his place; and hold him responsible for the entire administration of his division.

Seventh—Have it understood that the positions of chiefs in Bellevue Hospital should be, if possible, by promotion of the men doing the most efficient service in the smaller hospitals, and assistants in Bellevue Hospital to be promoted to be chiefs in the other hospitals, not directly to a position left vacant by their own chief.

Such a system might be inaugurated in one of two ways—either by the legislation out of office of all existing appointees; or, by the slower and fairer method of gradual consolidation as vacancies arose, until the whole of the medical or surgical division should be left to a single man. If such a man were inefficient and the universities should be unwilling to accept him, he should then be removed and the place filled in the contemplated manner. Such a system would not diminish the number of medical men connected with our public hospitals, but

would merely regrade them in a manner destined to secure continuity and accountability—hence medical and economic efficiency.

TREATMENT OF STAMMERING AND STUTTERING

Dr. E. W. Scripture, of New York City, addressed the Morris County Medical Society March 10th on the subject of speech defects. He explained the various symptoms of stuttering and stammering. These consisted of cramps and excessive tension of the muscles of repression, and of those in and around the larynx, and those of enunciation.

The cause of these cramps was found in a "compulsive idea," which made the subject stutter whenever he thought of his speech. To cure these cases, one method consists of distracting the patient's attention from his speech, by having him beat time, or make some other emphatic movement. Beating time is also serviceable in getting him to speak slowly. Proper breathing is also essential. A new method of treatment was described, namely, the "melody cure." Normal voices, he found in his researches, rise and fall in speaking the ordinary phrases. In saying "good morning," for instance, there is a decided rise and fall. But stutterers, in nine cases out of ten, do all their talking on one tone, owing to the fact that their laryngeal muscles are tightly contracted as an effect of their ailment. In view of this fact, Dr. Scripture started experiments for the purpose of introducing melody into the voices of stutterers. Stuttering is purely a nervous affliction, and he saw that if the mind of the sufferer was taken off his troubles in a simple way, the trouble ought to disappear. To get the stutterers to speak in a way different from their ordinary method, Dr. Scripture argued, would remove their compulsive idea about stuttering and consequently work a cure.

If his patient is not particularly intelligent, he first gets him to sing sentences or some familiar melody. In this way the patient gets the idea that his voice must go up and down. Then he is taught to speak sentences in which he has to slide his voice. In the first lessons this sliding of the voice is made excessive, in order to get away more completely and quickly from the ordinary monotonous speech of the sufferer. The patient is taught to say "Good morning," "How do you do?" "Give me a glass

of water, please," etc., all with excessive melody. Finally he is taught to introduce melody into all his conversation. In one case Dr. Scripture demonstrated his cure to a man who had stuttered frightfully all his life, and had tried every cure in vain. All the doctor intended to do in this particular case was to show that it was possible that the patient might be helped by the new method. But, to the surprise of the doctor, the patient ceased to stutter in five minutes and went out of his office talking with perfect ease. Since then he has reported that he stutters no more, and needs no further treatment. Most people, however, need considerable practice before they can remember to slide their voices up and down, according to instructions. Therefore the cure usually extends over periods ranging from five to fifty treatments.

The reason the cure is so effective is that the stuttering habit is associated in the mind of the patient with a definite manner of expression. It is not carried over to a manner of expression that the stutterer feels to be entirely different. For instance, a stutterer never stutters when he sings, because singing is to him an entirely different means of expression from that in which he finds difficulty.

Dr. Scripture then illustrated the methods of correcting the speech defects due to another cause, namely, negligent nerve action. To cure lispers a probe is inserted just between the teeth and over the tip of the tongue. This makes the narrow air passage which is essential to the sound of "S." To cure those who say "D" and "T" instead of "TH," the probe is inserted at the corner of the tongue, and to correct the use of "V" instead of the sound of "W," the probe is pressed on the underlip.

All these methods can be successfully employed by the general practitioner in the course of his ordinary office routine. Only the difficult cases need the aid of a specialist. These patients are, however, without exception, neurotic, or even neuropathic. They need the regular treatment of a physician, and should never be left to the blundering methods of inexperienced outsiders.

George Clemenceau, the present Premier of France, is a physician. He studied medicine in Paris, was interne in both the Nantes and Paris hospitals and at one time practised in New York City. He was an earnest and distinguished writer on medical subjects and is the author of a work on Anatomical Conceptions and General Physiology, which is still highly prized. Within five years two physicians have held the position of head of the French Cabinet.

UNUSUAL CLINICAL CASES.

Rupture of Kidney.

Dr. Berg, at the January 10th meeting of the New York Academy of Medicine, presented a woman who had a severe rupture of the kidney caused by being run over by an automobile. The kidney was torn obliquely from the upper junction of the pelvis with the cortex to its middle and lower third. A second rent was in a longitudinal direction along the inner border from the pelvis to the lower pole. The kidney was delivered into the wound, the rents repaired, and an uninterrupted recovery took place.

Brain Abscess Due to Typhoid Bacillus.

Gurd and Nelles report, in *Annals of Surgery* (January, 1908), a case in which a patient who had received a blow some two weeks before he came to hospital with typhoid fever, showed localized brain symptoms. Examination and treatment showed that the blow had caused a blood clot, which the typhoid bacillus infected, thus developing an abscess. Whether the bacillus was present in the blood at the time of injury or whether the typhoid developed subsequently it is impossible to say.

Gangrenous Appendix in an Infant.

Dixon reports a case of a baby twenty-four days old, which he operated on for strangulated right inguinal hernia, with eight centimeters of ileum and an adherent gangrenous appendix in the sac. The appendix was removed, the gut returned, and a radical operation performed. The baby did well. This, he says, is the youngest patient with appendix trouble on record.

Ascarides Affections.

Miyake reports from Japan a case of fatal ileus from accumulation of ascarides in a loop of the small intestine in a boy of eight; eighty-three ascarides were clumped and obstructed the lumen completely. In another case, an ascaris nine inches long in the gall bladder simulated a gall stone affection in a young man. In another young man numerous ascarides colonized in the abdominal wall, causing an abscess from which thirty ascarides were discharged in the pus, and others came later. In this case the worms had evidently perforated through a tuberculous abscess, and he adds that the stools should be examined carefully for worms in every case of tuberculous peritonitis, and if such are found, a course of medication to expel them is urgently indicated.—*Journal A. M. A.* (February 29, 1908.)

Intrauterine Gonorrheal Infection of the Eye.

Holzback, in *Monatsschrift für Geburtsch. und Gynäkologie* (Berlin, January, 1908), reports a case in which the child of a woman with gonococci in the birth passages was born with evidently fresh ulcerations in the cornea of both eyes; gonococci could be cultivated from the conjunctival secretions. The literature contains a number of similar cases which he summarizes. Comparison of these cases shows that this congenital gonorrheal infection probably occurred from some rupture in the bag of waters allowing access to the germs. The eye seems to offer particularly favorable conditions for infection when the membranes fail to protect the fetus against the invasion of the amniotic fluid by the gono-

cocci. The eye may show actual maceration from the effect of putrefying amniotic fluid, even with a living child. Intrauterine gonococcus infection of the eye seems to be merely a contact infection, and the danger is greater the earlier the bag of waters is ruptured and when the birth is prolonged from any cause. Under such circumstances special attention should be paid to prophylactic measures. There do not seem to be any means of preventing this uterine infection altogether.

A Piece of Paper in the Male Bladder.

Ernest G. Mark, M. D., Kansas City, Mo.—The following case is of interest from the fact that it adds to the already long list of foreign bodies found in the male bladder a unique specimen:

Patient—Mr. F. M., contractor, aged fifty-nine years, married, was referred to me by Dr. H. D. Hamilton, of this city, and was first seen by me on January 5, 1908.

History—Two weeks previously, on December 22, 1907, he had, while intoxicated, rolled up a long slip of paper which he introduced deeply into the urethra. He could give no explanation for this maneuver other than his intoxicated condition. About a week following he called on Dr. Hamilton, suffering from a fairly severe cystitis. He then stated that he had passed bits of paper during urination. He was placed on treatment, but without relief from his symptoms. Dr. Hamilton, suspecting the presence of more paper in the bladder, referred him to me.

Treatment—He was sent to the South Side Hospital, and on January 5 I examined him with the cystoscope under general anesthesia, for the reason that, in the event of the cystoscope proving the diagnosis, removal of the foreign body was, of course, essential. Examination revealed the paper in a fairly deep bas fond, rolled on itself and partially incrustated with urinary salts. The patient was put in an exaggerated Trendelenburg position and my air-inflation urethroscope inserted, using a No. 28, French, tube 15 centimeters in length. Forced air inflation gave a good view of the bladder and piece of paper, and an attempt was made to tear the paper to pieces by means of a pair of alligator forceps, as the piece, in its entirety, was too large to be removed through the urethroscope. Three small pieces were removed in this manner, but the paper, contrary to expectations, proved hard to tear, and, as the patient was taking the anesthetic badly, further procedure was deferred. The following day suprapubic cystotomy was done, Dr. Hamilton assisting, and a large piece of paper was removed. The patient made an uneventful recovery.—*Jour. A. M. A.* (February 29, 1908.)

Two Cases of Puerperal Sepsis Treated by Vaccines.

The *Edinburgh Medical Journal* for January, 1908, has the following abstract, which is of particular interest to the readers of THE JOURNAL:

Lloyd (*Intercolon. Med. Journ. Austral.*) reports the following cases: Case 1—Patient, 1-para, *aet.* 18, was admitted to hospital with a temperature of 101° F., and pulse 110, membranes ruptured, os the size of a florin. The patient was delivered with forceps next day, and the placenta was removed manually, sterilized rubber gloves being used. Four hours later patient had a rigor; temperature 103°, pulse 168. On the third day

cultures of uterine discharge showed streptococcus and staphylococcus. The uterus was plugged with iodoform gauze, and strychnine, iron and alcohol given internally. Later the uterus was swabbed with 2 per cent. solution of formaline and replugged. As the patient's condition did not improve, a vaccine was made, and an injection containing 100,000,000 cocci given on the sixth day, the blood examination at the same time showing a pure culture of *Staphylococcus albus*. Next day there was a leucocytosis of 21,800. All further local treatment was stopped. From this time progress was satisfactory, and the patient left the hospital well on the twenty-second day.

Case 2—Patient, 1-para, *aet.* 19, admitted to hospital after being in labor twelve hours. The presentation was occipito-posterior, and delivery was effected by forceps. On the eighth day the temperature was 105° F., and pulse 136. Cultures showed streptococcus and staphylococcus, and blood examinations showed all three organisms to be present. From these vaccines were made and injections commenced of 25,000,000 streptococci and 250,000,000 staphylococci. Rigors continued at intervals for thirty days. Seven injections of vaccine were given at intervals of two days, increased to double the quantity at each injection. For ten days vaccines were withheld, to be repeated again as the temperature kept high. On the fortieth day of illness 10 cc. blood taken from the patient gave no cultures. The improvement was going on steadily when patient left hospital against advice.—*Med. Rev. of Reviews* (February, 1908).

A Case of Appendicitis Complicating Pregnancy in Eighth Month—Operation, Miscarriage, Recovery.

—Charles O. Cooke, M. D., of Providence, R. I., reports the following case in *The Providence Medical Journal*, January, 1908: The patient was a woman thirty years of age, married ten years and has had four children, ages nine, six, four and sixteen months. Had one instrumental delivery. Following birth of the second child, patient was ill about six months with septicemia, abscesses in right shoulder and "milk leg." Since that time, patient has had pain above and to left of umbilicus. For the past thirteen years patient has had attacks of acute indigestion at intervals of two to three months. These attacks were characterized by severe pain in the epigastrium, and were accompanied by vomiting and diarrhoea. The pain never localized on the right side. Patient has never had pelvic trouble, never had frequent nor burning micturition. Last menstruation occurred on February 28, 1907, and according to her own calculation expected to be confined the last part of November. Has had morning sickness throughout pregnancy. The patient was seen by me for the first time on October 17, 1907, having been seized the preceding night with a severe attack of indigestion with distress in epigastrium. There was no nausea and no vomiting. Bowels have been regular and moved this morning. To-day has had periodical pains starting in back and running through to the front so much like labor pains that patient believed herself starting in labor and thought best to consult a physician.

Physical Examination—Well developed and well nourished woman. Pupils equal and react to light and distance. Mucous membranes not anemic. Tongue slightly coated. Heart and lungs normal. Abdomen size of eight months' pregnancy. Vertex presentation with head engaged.

Back of fetus on left side. Fetal heart heard on left side, and beating 140 to minute. Abdomen soft, no muscular spasm nor muscular rigidity. No tenderness over appendix. Slight tenderness in epigastrium. No free fluid in flanks. Vaginal Examination—Os patulous, admitting tip of index finger. Head very low. No exudate in pelvis. Temperature 100.4°. Pulse 96. During the night patient suffered excruciating pain running through from back to front and felt as if membranes were going to rupture.

October 18—Patient still suffering severe pain. Temperature 100°. Pulse 96. There is localized tenderness over left lower abdomen in the left iliac fossa. No tenderness whatsoever over appendiceal area. Fetal head is not engaged to-day and fundus of uterus is higher up. Pelvic examination shows os patulous but not dilated. The pain to-day is periodical and shooting from back to front of abdomen and patient says they resemble labor pains. October 19—Patient suffered acutely all night. Expression this morning is drawn and anxious. Tongue dry and thickly coated and lips are dry. Temperature 100°. Pulse 96. Heart and lungs normal. Pelvic examination negative and os is not dilated. To-day for the first time there is sharply localized tenderness over McBurney's point and an area of dullness size of palm of hand in that region. No free fluid detected in flanks. Blood examination shows leucocytes 19,000 and a differential count of 500 cells shows polynuclears ninety per cent.; mononuclears ten per cent.

The patient was seen in consultation to-night by Dr. Higgins, who confirmed the diagnosis of appendicitis and operation was immediately performed. Under ethyl-chloride and ether anesthesia the abdomen was opened by a three (3) inch muscle-splitting incision over McBurney's point. Upon nicking the peritoneum free fluid was present. Upon inspection of the peritoneal cavity nothing could be seen but uterus. The intestines were nowhere apparent. The incision was enlarged upwards by cutting across the fibres of the internal oblique muscle. The fallopian tube was free and covered with plastic exudate. Half-way upwards towards the liver the appendix was found buried beneath the cecum. The tip of the appendix for a distance of one and one-quarter inches was swollen and gangrenous. The meso-appendix was tied off with No. 2 plain gut. The base of the appendix was tied off with chromicized gut No. 2. The appendix was cut away and the stump cauterized with pure carbolic acid. A cigarette drain was placed at the upper angle of the wound leading down to the stump of the appendix. The incision was then closed below the drain as follows: Plain gut No. 2 continuous suture for the peritoneum. Interrupted chromicized sutures for the muscle. Continuous chromic gut No. 2 suture for the aponeurosis and interrupted silk worm gut sutures for the skin. The patient stood the operation well, pulse at no time being higher than 108 and made an excellent recovery from the anesthetic. Following the operation patient was given two pints of saline per rectum, given a drop at a time, also eserine salicylate 1-40 grain subcutaneously every four hours. Bowels moved slightly in the afternoon of first day. Temperature averaged 100.8° and pulse averaged 100, abdomen quite distended.

October 20—Second day following operation. Temperature averaged 101°. Pulse 112. Bowels moved well with high enemas of glycerine, turpentine and suds. Abdomen softer than yester-

day. Patient became very restless at night and complained of severe pain in back. October 21—Third day. Temperature somewhat lower, 99°—100°. Pulse 100—110. Abdomen distended and hard. Patient was given five high enemas during the day with absolutely no result. Pulse at 11 P. M. had risen to 115. Expression drawn and anxious. Dressing changed for first time, gauze saturated with serum but no pus. Drain loosened and sterile gauze applied. October 22—Fourth day. Temperature 99° this morning. Pulse is 130 and very poor quality. Bowels moved well several times during the night with high enemas. Patient was somewhat nauseated all night and complained of severe pain in back similar to pain before the operation. The pains in back grew steadily worse all the morning but did not seem like labor pains. Dressing was done and drain removed and a cigarette drain replaced. The sinus is still discharging serum but there is no pus. Patient miscarried suddenly at 2.20 P. M., the baby being born with membranes unruptured. The child weighed four pounds and thirteen ounces and was born alive. Following delivery bowels continued to move well but patient suffered from cramps and hiccoughs. The pulse continued rapid and during the night was 140, weak, soft and thready. Patient was given digitalin in doses of 1-50 grain subcutaneously every two hours. October 23—Temperature normal. Pulse 120 and better character. Hiccoughs continue almost constantly. Bowels moving freely with enemas. The dressing changed but drain not disturbed owing to altered position of uterus. Patient is much more comfortable than on any preceding day and expression is better. October 24—Temperature normal. Pulse 100 and of excellent character. Hiccoughs continue and are very distressing. Dressing changed; wound still discharging serum. Drain loosened. Bowels moving freely. Baby is living and doing nicely on modified milk. October 25—Improvement continues. Pulse good character. Bowels moving freely. Drain still undisturbed. October 26—Eighth day since operation and fourth day since delivery. Temperature normal. Pulse 100. Patient is very comfortable. Tongue cleaner. Dressing changed and drain removed. Sinus is discharging pus for the first time. Drain replaced. Bowels moving freely. October 27—Temperature still normal. Pulse 90 and of excellent character. Bowels moving freely. Patient still on liquid diet. Stitches removed to-day; considerable thick pus followed removal of stitches and the sinus is discharging pus profusely. General condition of patient excellent. October 29—Improvement noticeable daily. Temperature normal and pulse 76. Patient is feeling fine, has no aches nor pains. Dressing done daily, sinus discharging profusely.

From now on convalescence was uneventful. Improvement was rapid. The dressing was done daily until the sinus had nearly closed. The patient sat up in bed with a back-rest on November 6 and was out of bed for the first time on November 12. On December 1, at date of writing, the sinus is completely closed and patient is up and about the house. The baby is doing nicely and weighs five pounds and fourteen ounces, a gain of one pound and one ounce over its birth weight.

In the performance of high tracheotomy a great deal of room can be gained by dividing transversely the fascia that extends upward from the thyroid.—*Amer. Jour. of Surgery.*

Reports from County Societies.

GLOUCESTER COUNTY.

H. A. Wilson, M. D., Woodbury, Reporter.

The regular meeting of the Gloucester County Medical Society was held March 19th, at Paul's Hotel, Woodbury. The President, Dr. Oliphant, presided and nineteen members were present. Drs. John M. Swan, D. B. Phifer, George Laws and Irby, of Philadelphia; D. H. Oliver and Ellsmore Stites, of Bridgeton; Charles W. Wilson, Vineland; Philip Marvel, Atlantic City; H. H. Davis and Emma Richardson, Camden; G. T. Tracy, Beverly, and M. F. Lummings, of Pitman Grove, were welcome visitors and were invited to participate in the discussions.

Dr. Swan read an interesting and exceedingly practical paper, on "The Diagnostic Significance of Leucocytosis," and presented several specimens under the microscope.

Dr. Phifer, resident physician in the German Hospital, presented a report of an autopsy upon a patient of Dr. Edwards', in which there was a decidedly mixed infection. A copy of the report is promised for a later issue of the JOURNAL.

Measles and la grippe were reported epidemic in the county and scarlet fever in some sections.

Dr. L. M. Halsey addressed the meeting upon the subject of "Medical Legislation," and urged the members to unite in a protest against the passage of Assembly Bill No. 262, and desired all who could possibly do so to go to Trenton on Monday, March 23, to attend the hearing on the measure.

After adjournment, the Society entertained its guests at dinner, when medicine and all things medical were for the time being forgotten.

Physicians' Protective Association.

Dr. Wilson also sends the following report:

The physicians of Woodbury and neighboring towns have formed a society called the "Physicians' Protective Association" of Woodbury and vicinity, and comprising all physicians of whatever school of medicine, practicing in Woodbury, Westville, Wenonah and Mantua. The objects of the organization are twofold: First, to put a stop to the professional dead-beats; each member agreeing, when a man has been reported as delinquent, to refuse to render any service except upon a strictly cash basis, and, second, to promote fraternal feeling among the members. Just how much benefit will be derived along the lines of the first object remains to be seen.

Meetings are held monthly at the homes of the members, where, after an hour spent in discussion along business lines, adjournment is made to the dining room, and over a sumptuous banquet we are all boys again, and the fellowship and good cheer that prevails proves that the second feature is already bearing fruit.

Woodbury, N. J., March 19, 1908.

MORRIS COUNTY.

H. W. Kice, M. D., Secretary.

The Morris County Medical Society held its annual meeting in Dover, March 10, 1908. The following were elected officers for the ensuing year:

President—C. C. Beling.

Vice-President—A. W. Condict.

Secretary—H. W. Kice.

Treasurer—James Douglas.

Reporter—J. W. Farrow.

Committee on Program—F. W. Flagge and A. A. Lewis.

Delegates to Cape May—P. S. Mallon and L. L. Mial.

Retiring President George H. Foster, of Rockaway, read his address to the Society, in which he emphasized the importance of physicians observing ethical teachings and the Golden Rule in their dealings one with the other.

Dr. C. C. Beling read a paper on "The Treatment of Cerebral Diseases by Electro-Therapeutics," demonstrating his method by appropriate apparatus.

Dr. E. W. Scripture, of New York City, addressed the Society on "Treatment of Stammering and Stuttering by the Physician." A number of patients were presented by the members of the Society, on whom the doctor demonstrated his method, which proved to be very interesting and instructive. A synopsis is sent herewith for publication in the JOURNAL.

Wharton, N. J., March 23, 1908.

SALEM COUNTY.

John F. Smith, M. D., Reporter.

The regular meeting of the Salem County Medical Society was held at the Schaefer House, Salem, on February 5th, at 2 o'clock P. M. The President, Dr. Nathaniel S. Hires, presided. Owing to a severe snow storm very few out-of-town members and guests were present.

After listening to a report from the delegate to the Cranford Pure Food Convention, a new constitution and by-laws were read, discussed and laid over until the next meeting.

Dinner was served at 4 o'clock and the Society adjourned to meet at the Schaefer House, Salem, for the annual meeting in May.

Salem, N. J., March 5, 1908.

Meetings of Medical Organizations.

THE NEWARK MEDICAL LEAGUE.

Louis Weiss, M. D., Secretary.

The Newark Medical League invited the profession of Essex County to attend a lecture on "The Open Air Treatment in Pneumonia," by Dr. W. P. Northrup, of New York City, given at the Continental Hotel, Newark. The lecture was well attended and highly appreciated by those present. Dr. Northrup showed photographs, illustrating the open air treatment, as carried out at the present time on the roof of the Presbyterian Hospital, New York, under his guidance. He stated that the open air treatment was not confined to pneumonia, but that many other diseases, such as typhoid, scarlet fever, bronchitis, etc., were greatly benefited by it. He mentioned one acute case of whooping cough, bronchitis and convulsions cured by the open air treatment, which could hardly have recovered otherwise. At the outset of the lecture, Dr. Northrup graphically described the injurious effects of stagnated air. Remarks were made by Drs. Coit, Corwin and English, Dr. Northrup concluding. A vote of thanks was given Dr. Northrup.

The meeting then adjourned and Dr. Northrup was escorted to the dining room, where a dinner was served in his honor. Those present

at the dinner, besides Dr. Northrup, were Drs. Coit, Corwin, English, Stanwood and members of the Newark Medical League.

Before the introduction of Dr. Northrup, the audience, as representative physicians of Essex County, adopted a resolution opposing House Bill 118, known as the anti-vivisection measure, and authorized the secretary to place in the hands of the Senator and each Assemblyman of Essex County a copy of the resolution, and urge them to oppose the measure.

Fourth International Congress for Medical Electrology and Radiology.—The first international congress was held at Paris in 1900, the second at Berlin in 1903, and the third at Milan in 1905. The fourth is to convene at Amsterdam, September 1 to 5, 1908, and will be accompanied by an exhibition of appliances for clinical and laboratory work and collections of skiagrams, etc. Professor Wertheim Salomonson is president of the congress, and Dr. J. G. Gohl, Vondelstraat 53, Amsterdam, is the general secretary. Membership in the congress is open to all taking an interest in the development of the electrobiologic and radiologic sciences. English, French and German are the congress languages, and the membership fee is \$5.

Fifth Pan-American Medical Congress.—This congress is to meet at Guatemala, August 6 to 10, 1908, and arrangements are being made for twenty-one sections. English, Spanish, French and Portuguese are the congress languages, and articles intended for the congress must be in the hands of the secretary, Dr. José Azurdia, Escuela de Medicina de Guatemala, before July 15. The last Pan-American congress was held at Panama in 1905, except for the delayed contingent, whose steamer broke down, and whose "proceedings" in their improvised "congress" on board were accepted as part of the regular congress.

INTERNATIONAL TUBERCULOSIS CONGRESS.

The Tuberculosis Committee of the New York State Charities Aid Association has sent out the following circulars concerning the International Congress on Tuberculosis:

What will probably be the crest of the wave of general awakening to the full realization of the devastation of the Great White Plague, and the need of its eradication, will take place at the time of the great meetings of the International Congress on Tuberculosis to be held in Washington, D. C., September 21st to October 12th. President Roosevelt will be the President of the Congress.

The Congress will consist of two main divisions, namely, the meetings of the seven sections on pathology, medical and surgical treatment of adults and children, methods of prevention, State and municipal control and bovine tuberculosis and the great exhibition which will illustrate all phases of tuberculosis work. The work of organizing the New York State interests in the Congress is well under way. That looking towards the sending of a New York State exhibition to Washington was inaugurated by Governor Hughes on October 2d in a letter to Dr. E. H. Porter, State Commissioner of Health. The State traveling tuberculosis exhibition now being shown in various parts of the State in the State cam-

paign conducted by the State Charities Aid Association in coöperation with the State Department of Health, will be thoroughly revised and brought up to date, and with a large pathological exhibition to be added will be sent to Washington.

For the direction of the other lines of activity for the Congress a large State committee is being formed. The executive committee met recently in the Academy of Medicine in New York City and decided to appoint as members of the large committee: State and county officials directing medical and tuberculosis work, prominent physicians, veterinarians, medical scientists and officials of tuberculosis sanatoria, local health officers and municipal officials, leading educationalists, prominent labor union leaders, prominent members of the press, and managers of large industrial plants. It will be the aim of this State committee to insure at an early date a large New York State delegation to the Congress by obtaining a comprehensive list of full and associate members of the Congress. Any person may become a full member by the payment of \$5.00, or an associate member for \$2.00.

It is hoped that liberal individuals will offer prizes of \$500 to \$1000 for such objects as: (a) A new design for a sanatorium having economic advantages over the best existing sanatoria for the care of tuberculosis; (b) a better type of dispensary for the diagnosis and treatment of tuberculosis among the poor; (c) a better type of home for wage earners, designed with special reference to the prevention of tuberculosis; (d) a meritorious plan of combining the interests of employers and wage earners to detect and neutralize the causes of tuberculosis in industrial occupations; (e) a competitive display of the methods employed and the results obtained by the many voluntary organizations engaged in the anti-tuberculosis campaign; (f) the bodily transfer of a few highly trained workers (visiting tuberculosis nurses, for instance) to Washington for the purpose of demonstrating their methods in actual practice; (g) a good example of an industrial colony in which the tuberculous patient may pass safely through the interval between discharge from the sanatorium and return to former occupations.

Special pamphlets or articles for the instruction of adults generally, teachers, mothers, workers in dusty occupations, or school children in the grammar school and primary grades. All communications should be addressed to the Secretary General, Dr. J. S. Fulton, Colorado Building, Washington, D. C.

ELEVEN PRIZES OFFERED.

The Central Committee of the International Congress on Tuberculosis Has Announced the Offer of the Following Prizes:

1. A prize of \$1,000 is offered for the best evidence of effective work in the prevention or relief of tuberculosis by any voluntary Association since the last International Congress in 1905. In addition to the prize of \$1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. Evidence is to include all forms of printed matter, educational leaflets, etc.; report showing increase of membership, organization, classes reached—such as labor unions, schools, churches, etc.; lectures given; influence in stimulating local Boards of Health, schools, dispensaries, hospitals for the care of tubercu-

losis; newspaper clippings of meetings held; methods of raising money; method of keeping accounts. Each competitor must present a brief or report in printed form. No formal announcement of intention to compete is required.

II. A prize of \$1,000 is offered for the best exhibit of an existing sanatorium for the treatment of curable cases of tuberculosis among the working classes. In addition to the prize of \$1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. The exhibit must show in detail construction, equipment, management, and results obtained. Each competitor must present a brief or report in printed form.

III. A prize of \$1,000 is offered for the best exhibit of a furnished house, for a family or group of families of the working class, designed in the interest of the crusade against tuberculosis. In addition to the prize of \$1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. This prize is designed to stimulate efforts towards securing a maximum of sunlight, ventilation, proper heating, and general sanitary arrangements for an inexpensive home. A model of house and furnishings is required. Each competitor must present a brief with drawings, specifications, estimates, etc., with an explanation of points of special excellence. Entry may be made under competitor's own name.

IV. A prize of \$1,000 is offered for the best exhibit of a dispensary or kindred institution for the treatment of the tuberculous poor. In addition to the prize of \$1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. The exhibit must show in detail construction, equipment, management, and results obtained. Each competitor must present a brief or report in printed form.

V. A prize of \$1,000 is offered for the best exhibit of a hospital for the treatment of advanced pulmonary tuberculosis. In addition to the prize of \$1,000, two gold medals and three silver medals will be awarded. The prize and medals will be accompanied by diplomas or certificates of award. The exhibit must show in detail construction, equipment, management and results obtained. Each competitor must present a brief or report in printed form.

VI. The Hodgkins Fund Prize of \$1,500 is offered by the Smithsonian Institution for the best treatise that may be submitted on "The Relation of Atmospheric Air to Tuberculosis." The detailed definition of this prize may be obtained from the Secretary-General of the International Congress or Secretary of the Smithsonian Institution, Chas. D. Walcott.

VII. Prizes for Educational Leaflets:

A prize of \$100 is offered for the best educational leaflet submitted in each of the seven classes defined below. In addition to the prize of \$100, a gold medal and two silver medals will be awarded in each class. Each prize and medal will be accompanied by a diploma or certificate of award.

Competitors must be entered under assumed names: (a) for adults generally (not to exceed 1,000 words); (b) for teachers (not to exceed 2,000 words); (c) for mothers (not to exceed 1,000 words); (d) for indoor workers (not to

exceed 1,000 words); (e) for dairy farmers (not to exceed 1,000 words); (f) for school children in grammar school grades (not to exceed 500 words). In classes a, b, c, d, e, and f, brevity of statement without sacrifice of clearness will be of weight in awarding. All leaflets entered must be printed in the form they are designed to take; (g) pictorial booklet for school children in primary grades and for the nursery. Class g is designed to produce an artistic picture-book for children, extolling the value of fresh air, sunlight, cleanliness, etc., and showing contrasting conditions. "Slovenly Peter" has been suggested as a possible type. Entry may be made in the form of original designs without printing.

VIII. A gold medal and two silver medals are offered for the best exhibits sent in by any State of the United States, illustrating effective organization for the restriction of tuberculosis. Each medal will be accompanied by a diploma or certificate of award.

IX. A gold medal and two silver medals are offered for the best exhibits sent in by any State or Country (the United States excluded), illustrating effective organization for the restriction of tuberculosis. Each medal will be accompanied by a diploma or certificate of award.

X. A gold medal and two silver medals are offered for each of the following exhibits; each medal will be accompanied by a diploma or certificate of award; wherever possible each competitor is required to file a brief or printed report: (a) For the best contribution to the pathological exhibit; (b) for the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any State of the United States. Brief required; (c) for the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any State or Country (the United States excluded). Brief required; (d) for the best exhibit of laws and ordinances in force June 1st, 1908, for the prevention of tuberculosis by any municipality in the world. Brief required; (e) for the society engaged in the crusade against tuberculosis having the largest membership in relation to population. Brief required; (f) for the plans which have been proven best for raising money for the crusade against tuberculosis. Brief required; (g) for the best exhibit of a passenger railway car in the interest of the crusade against tuberculosis. Brief required; (h) for the best plans for employment for arrested cases of tuberculosis. Brief required.

XI. Prizes of two gold medals and three silver medals will be awarded for the best exhibit of a work-shop or factory in the interest of the crusade against tuberculosis. These medals will be accompanied by diplomas or certificates of award. The exhibit must show in detail construction, equipment, management, and results obtained. Each competitor must present a brief or report in printed form.

Signed by the Committee on Prizes: Dr. Charles J. Hatfield, Philadelphia, Chairman; Dr. Thomas G. Ashton, Philadelphia, Secretary.

A mesenteric cyst may give the same signs as a small ovarian cyst. Mesenteric cysts, although movable, are usually attached to the ascending colon. When the colon is dilated a direct relation can be made out between the gut and the tumor.

PRIZE OF \$1500 OFFERED.**"The Relation of Atmospheric Air to Tuberculosis."****SMITHSONIAN INSTITUTION****HODGKINS FUND PRIZE**

In October, 1891, Thomas George Hodgkins, Esquire, of Setauket, New York, made a donation to the Smithsonian Institution, the income from a part of which was to be devoted to "the increase and diffusion of more exact knowledge in regard to the nature and properties of atmospheric air in connection with the welfare of man."

In the furtherance of the doner's wishes, the Smithsonian Institution has from time to time offered prizes, awarded medals, made grants for investigations, and issued publications.

In connection with the approaching International Congress on Tuberculosis, which will be held in Washington, September 21, to October 12, 1908, a prize of \$1,500 is offered for the best treatise that may be submitted to that Congress "On the Relation of Atmospheric Air to Tuberculosis."

The treatise may be written in English, French, German, Spanish or Italian. They will be examined and the prize awarded by a committee appointed by the Secretary of the Smithsonian Institution in conjunction with the officers of the International Congress on Tuberculosis.

The right is reserved to award no prize if in the judgment of the committee no contribution is offered of sufficient merit to warrant such action.

The Smithsonian Institution reserves the right to publish the treatise to which the prize is awarded.

Further information, if desired by persons intending to become competitors, will be furnished on application.

CHARLES D. WALCOTT,

Secretary, Smithsonian Institution.

Washington, February 3, 1908.

CLINICAL LECTURES.

On Wednesday afternoons at 4.15 o'clock, in the Out-Patient Hall of the New York Skin and Cancer Hospital, Second avenue, corner 19th street, New York City, Dr. L. Duncan Bulkley will deliver clinical lectures on Diseases of the Skin until April 15th. Dr. William Seaman Bainbridge will deliver a lecture on the Treatment of Unremovable Cancer with exhibition of cases, April 22, 1908. These lectures will be free to the medical profession.

COUNCIL ON MEDICAL EDUCATION.

The fourth conference of the Council on Medical Education of the American Medical Association will be held in the Auditorium Hotel, Chicago, Ill., April 13, 1908, beginning at 10 o'clock A. M.

It will open with an address by the Chairman, Dr. A. D. Bevan, of Chicago, and there will be reports with discussions as follows: Report of Committee on Preliminary Education; Report of Committee on What Should Constitute a Medical College in Good Standing; Report of Committee on The Essentials of a Model Medical Practice Act; a Discussion on The Character of the State Medical Licensing Examination, and also a Discussion on Practical Ideas Concerning Reciprocity. The program contains the names of several

eminent physicians connected with the medical colleges, State boards of health and boards of medical examiners in the leading centers of medical education throughout the country. Dr. J. W. Bennett, Secretary of the State Board of Medical Examiners of New Jersey, will take part in the discussion on "The Character of the State Medical Licensing Examination."

TO AMERICAN PHYSICIANS INTERESTED IN THE ALCOHOLIC PROBLEM.

During 1907 over 200 papers, lectures and pamphlets were published in Europe and America concerning alcoholism and inebriety from a purely scientific point of view. Many of the authors complain that these papers were practically lost, because they did not reach medical men interested in the subject. The Scientific Federation Bureau, organized in Boston two years ago for the purpose of collecting and disseminating the facts concerning the alcoholic problem, proposes to secure a list of medical men who are interested in the scientific study of the alcoholic problem. This list will be valuable for authors and students, who wish to address a special audience of physicians, not only to increase their interests, but to stimulate more exact studies of the subject. Such a list will enable the Bureau to extend its work of accumulating papers and reprints, of all that is written, and keep authors and readers familiar with the work done in this field. All physicians who are interested in the scientific study of the alcoholic problem, and the work of medical men at home and abroad along these lines, are urged to send their names and addresses so as to be registered and receive copies of papers and abstracts from authors and others who may wish to write directly to interested persons. As chairman of the board of directors of the Scientific Federation Bureau, I earnestly request all physicians interested in this subject to send me, not only their own names, but the names of other medical men who would care to keep in touch with the new medical literature along this line, and the latest conclusions in the scientific world concerning this problem.

Address T. D. CROTHERS, M. D., Chairman, Hartford, Conn.

New Members of the Society for the Relief of Widows and Orphans of Medical Men of New Jersey—At the February meeting of the Board of Trustees, the following were elected members: Drs. Elmer H. Ames, Louis Baumann, M. Hecht, D. B. McCartie, John J. McLean, W. Menger, Charles H. Purdy, George L. Warren and Elmer G. Wherry.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM NEW JERSEY.

Theophilus H. Boysen, Egg Harbor.

Morton M. Kent, Trenton.

Arthur Stern, Elizabeth.

Physicians Form a Union.

Boston, Jan. 12.—About two hundred physicians of greater Boston attended three different meetings in different suburbs of Boston to-day, and formally organized the Physicians' Protective Association, which has the nature of a union. At the same time the physicians adopted a new scale of prices, which was given to the newspapers for publication.

THE JOURNAL

OF THE

Medical Society of New Jersey.

APRIL, 1908.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

We regret that some changes in the printing office from which our JOURNAL is issued, and the illness of its foreman who has had charge of our work, has caused delay in its issue this month and will account for any defects that may possibly appear.

OUR ANNUAL MEETING.

Again we call attention to the one hundred and forty-second Annual Meeting of the Medical Society of New Jersey—Cape May, June 18-20, 1908—and express our earnest desire and, we believe, that of every officer of the Society, that every effort possible shall be made by our County Societies to make it a meeting of unusual interest and profit to our profession. As most of the delegates will be elected at the April meeting of the County Societies, we would especially urge that delegates be elected who will attend, or if they find it impossible to do so after their election that some provision be made to fill vacancies in the delegation. The Committee on Scientific Work, Dr. E. J. Marsh, chairman, is endeavoring to secure an excellent programme of scientific papers and addresses, and its effort is meeting with success. We announce that Dr. Maurice H. Richardson, of Boston, Mass., Moseley Professor of Surgery in Harvard University, will deliver the Oration on Surgery and Dr. William K. Newton, of Paterson, N. J., the Oration on

Medicine. There will be also some important business matters to come before the House of Delegates, and it is of the greatest importance that every county society shall be well represented. Further announcements will be made in the May issue of our JOURNAL.

Let us all make our plans for the summer's rest from active work to take in this annual meeting.

MEMORIES OF THE PAST.

The editor of the JOURNAL, though always averse to any reference to himself, cannot resist the temptation to make this one exception to the rule. In this case, however, it is not to call attention to self, but solely to express his profound regard for the Medical Society of New Jersey and the noble men who throughout its long history—142 years—have caused it to be respected throughout the country. The month of March closed forty years of our work in the medical profession and an equal period of membership in this Society. We take this occasion to speak of our connection with the Medical Society of New Jersey and our association with many of the ablest men of our State who have been prominent in its records, and whose character, attainments and work have advanced and honored our profession, given the Society front rank among its sister societies, won for them imperishable names and brought to our State and its citizens incalculable benefits, as being among the most precious of privileges and blessings that have marked these forty years. Of the living we shall not speak except to say that they are worthily maintaining the record of the past and we count it an honor to be associated with them.

Memory has recently been very active in recalling the noble men whose names appeared in our annual volume of 1868. Every officer gone—the last, Dr. J. C. Johnson, then president, recently—all the 25 Fellows then living (and 22 of the 39 since becoming Fellows); all the Honorary Members, and of the 304 members whose names

were then enrolled only 25 are living to-day. We recall some of the honored names, in alphabetical rather than chronological order:

BALDWIN, BARKER, BLANE, COLEMAN, COLES, COOK, COOPER, CORSON, CULLEN, DAYTON, DOUGHERTY, ELMER, ENGLISH (J. S.), FITHIAN, FORMAN, GAUNTT, GREEN, HASBROUCK, HODGE, HUNT, LILLY, JOHNSON, LARISON, LONGSTREET, MARCY, ME-CRAY, MORROGH, NEWELL, OAKLEY, O'GORMAN, PARRISH, PENNINGTON, PIERSON, PUGH, RIDGE, RIGGS, ROGERS, RYERSON, SCHENCK, SHEPHERD, SMITH, SNOWDEN, STRATTON, STUDDIFORD, TAYLOR, THOMASON, THORNTON, TOMLINSON, VARICK, WATSON, WICKES AND WOOLVERTON.

Men whom it has been our privilege and honor to have personally known and with most of whom it has been one of our greatest honors and blessings to have been brought in close relation in this Society's work. We express the sincere and earnest hope that when the next forty years shall have passed that the names in our records to-day may be as worthy of honorable mention; that they may represent something of the character, attainment and good work done for the Society, for our profession and for the good of humanity as do those we gratefully recall to-day.

INTERNATIONAL CONGRESS ON TUBERCULOSIS.

The coming International Congress on Tuberculosis, at Washington, D. C., next September promises to be one of the most notable gatherings of scientific men ever held in this country. This Congress meets once in three years; it has never met in America and will not meet here again in many years. It will be a *real World's Congress*, which will for three weeks discuss the various phases of the Tuberculosis problem by the most eminent men in this and other countries, with special lectures open to the members and the general public. There will be connected with it a great Tuberculosis Exposition, which will show what is being done throughout the world in

the vigorous warfare that is being waged against Tuberculosis, and several Clinics and Demonstrations will give the medical and lay delegates object lessons on the causes and prevention of the disease.

Our Government is interested in this Congress. President Theodore Roosevelt will preside; seven of the nine Departments of the Government will participate in it; all of the forty-six States have their own committees, and they will endeavor to secure for their various States the utmost possible benefit from this Congress. Attention is called to the offers of Prizes in other columns of our JOURNAL—that of \$1,500 made by the Smithsonian Institution and the eleven prizes offered by the Central Committee of the International Congress. It is desirable that our country shall take a leading part in this Congress, that the American membership shall reach ten thousand persons. There are two classes of members: Active, who pay a fee of \$5, and Associate, \$2. We hope that the medical men of New Jersey will take an active interest in this great gathering.

STATE BOARD OF HEALTH.

We believe there has been no occasion for the medical men of New Jersey to antagonize Senate Bill No. 61, which provides for a new State Board of Health, but there is good reason why they should use their influence with the Governor for the appointment of the ablest men who can be obtained in constituting the new board—men versed in sanitary science, who will be practical and efficient in applying its laws and who will zealously guard against all political appointments and actions. If there is one position preëminent where political influence and favoritism should never enter it is in that one which has to do with the preservation of the health and lives of our citizens.

We think that there can be no doubt that medical men are the proper custodians of the health interests of our State and that a majority, or at least one-half of the board

should be medical men who are educated in the science and art of public sanitation. As the duties of the State Sewerage Commission are hereafter to devolve on this new board, of course one or two of the ablest civil engineers procurable should, and doubtless will, be appointed. We believe the Governor desires to appoint good men, but let us help him by good advice, or strengthen him in the purpose to resist the pressure that may be made to secure the appointment by or for men of political influence. The bill has passed the Senate and we are informed that it will probably pass the Assembly.

OSTEOPATHIC BILL—262.

The hearing given by the Assembly Committee having under consideration the Osteopathic Assembly Bill No. 262, on Monday, March 23, in the State House, Trenton, was very largely attended, a large number of the members of our profession from various parts of our State were present under the good leadership of Dr. L. M. Halsey, chairman of the Committee on Legislation, to oppose especially the sections of the bill which were calculated to lower the standard of requirement for licensure to practice medicine in our State—the provision for dual medical examining boards and section 5 particularly. Dr. Halsey ably opened the discussion and was followed by Drs. Wilson and Pierson of Elizabeth, Bleyde of Newark, Howard and H. H. Davis of Camden, P. Marvel of Atlantic City, Atkinson of Trenton, Spence of Jersey City, English of New Brunswick, Murray of Plainfield and others.

The osteopaths then spoke in advocacy of the measure and it was evident from their remarks that they had been compelled, by the known attitude of the legislative committee having the bill in charge, to abandon their demand for a separate board and to agree to the elimination of section five of their bill. In fact, they had drawn a substitute bill, omitting those provisions in the original bill No. 262. This is substantially

the Frelinghuysen bill, which passed the Senate last year—on which our medical men compromised. The osteopathic substitute, however, somewhat lowers the requirements of candidates applying to the State Board of Medical Examiners for license to practice, by lessening the courses of study in their medical colleges. They contended that none of their colleges gave so long terms of study as the Frelinghuysen bill required, which would virtually prevent osteopaths from securing license in the State under that bill. The very strongest argument we hold against *their* bill and *for* the Frelinghuysen bill, and they *ought* to advocate the latter if they believe their peculiar system is capable of improvement. The present law does require of applicants for license those longer courses of study and the medical colleges of the regular and homeopathic schools have been compelled to advance their curricula in order to enable their graduates to take examination for license to practice in New Jersey, by our State Board of Medical Examiners. The one contention of our members is for the maintenance of New Jersey's high standard of medical licensure, for the protection of her citizens against incompetent physicians and charlatans. We should insist on nothing *less protective* than the Frelinghuysen Bill.

OUR JOURNAL'S DEFECTS.

WHO IS RESPONSIBLE?

The editor of this JOURNAL has always believed, and *as far as the members of our State Medical Society have made it possible*, has acted upon that belief, that the JOURNAL should first of all recognize and record the work of the medical men of New Jersey—the contributions they are making to the progress of scientific knowledge and the art that applies it, also the work of our county and local societies, and public institutions and charities with which medical men are prominently connected; then, for the information of the medical men of New Jersey, especially the large number of them who take few, if any, med-

ical journals—some take only our own—information of what medical men outside our State are contributing through other medical journals. That we wish it distinctly understood is our position and the members of the Publication Committee are in perfect accord with it.

We emphasize the above statement of our position because of some criticism that the JOURNAL is giving too much of the work of outside physicians and from outside journals and too little to the work of the medical men of our State. We repeat our remark above—as far as the members of our State Medical Society have made it possible. Now, as to facts: (1) We have plenty of material contributed by medical men of New Jersey for several months' issues after our annual meeting—papers, etc., there read; for the last three or four months of each year we have plead through the JOURNAL and by personal letter for papers, reports of clinical cases, correspondence on medical questions, etc., with but little response; even some who have offered this criticism have failed to respond; (2) the JOURNAL is issued for the use of more than 1,200 members of our Society, not for only those in our cities and towns who have extensive practices with hospital experience, and who keep well informed through a large number of domestic and foreign medical journals, and who do not need our clippings from other journals. We must make the JOURNAL helpful to the hundreds who take few, if any, other medical journals.

We have been somewhat surprised to find some excellent scientific papers, information concerning county and local societies, personals, etc., in other medical journals contributed by our own members; that of course we have no thought of criticising, but we would kindly suggest that our JOURNAL be furnished a copy of the same, so that they would appear about the same time in this JOURNAL also.

We know of no medical journals published that do not give considerable space to abstracts of papers and other items from

many other medical journals, domestic and foreign, *e. g.*, the *A. M. A. Journal*, the *Medical Record*, the *N. Y. Medical Journal* and the various State society journals. Such items we know that very many of our members desire to have in our JOURNAL.

One word in conclusion: We are always pleased to hear what the members of our Society have to say in reference to the JOURNAL; we are never offended by kindly adverse criticism; we feel the force of the one referred to. Will those who make it help us to correct the defect? They have it in their power to do so and their coöperation will be greatly appreciated.

ANIMAL EXPERIMENTATION.

HOWARD A. KELLY, M. D., F. R. C. S. EDIN.

DEAR DR. ENGLISH:

Excuse my delay in replying to your letter, but I am simply overwhelmed with work. The name "vivisection" ought to be dropped and the name "animal experimentation" substituted, as vivisection has too many memories of early days of physiological experiments which were often unnecessarily cruel. In these days animal experimentation is of value both to man and beast. At the Johns Hopkins Hospital we have a wonderful laboratory under the management of Dr. Harvey Cushing, which is conducted in connection with the animal hospital, where the students receive their experimental training before stepping out into the world to operate on human beings. Many sick animals are brought there for treatment and they receive the same minute care as regards cleanliness and surgical technique as human beings in the Johns Hopkins Hospital proper.

We owe vaccine and the various serums to the proper use of animals, and it ought to have the hearty endorsement of every human being who cares for animals or desires to see the sufferings of mankind alleviated.

Very sincerely yours,

H. A. KELLY.

Baltimore, March 6, 1908.

THE OSTEOPATHIC BILL.

Norton L. Wilson, M. D., of Elizabeth, spoke at the hearing granted by the Assembly Committee on Bill No. 252, March 23d. The following is an abstract of his speech:

"It is the duty of municipalities and States to protect the lives, the property and the health of their citizens. There is no profession upon which the lives and happiness of so many people depend, as upon that of the medical profession. A quack or pretender or one with false theories is not to be trusted with human life.

"Theorists are constantly springing up, and because they can in some instances show apparent good results is no reason why we should stultify our conscience and say to ourselves perhaps, after all, there is something in this new method of practice. Ask yourselves the question, Would I employ an osteopath if my little one were stricken down with diphtheria? Could I have any

faith in the rubbing of the spinal column to effect a cure in that dread disease? Or would I send for the trained and experienced man who makes every effort to ascertain that my child has diphtheria and then proceeds to combat the disease by injecting into the blood the anti-toxin for the cure of diphtheria.

"Gentlemen, you have no more right to permit charlatanism to exist in this State, to practice upon her citizens, than you have to ruin their morals by licensing the house of ill repute.

"The standard of education, not only in my profession, but in that of the law, is none too high. It is your duty to throw about our citizens every safeguard, so that their health may be protected and their lives spared, and to this end you have established a State Board of Health, every member of which has labored for the welfare of its citizens, without recompense. You have also established a Board of Examiners to inquire into the fitness of the man who seeks to practice upon the citizens of this State and now because the osteopath cannot pass the prescribed examination, he seeks to enter the field of medicine through the back door, and asks you to give him a special examination, because, as he says, he only wants to practice a specialty.

"Would you license a young man who comes before the legal board for examination and says: 'Gentlemen, I cannot pass your examination, but if you will examine me on marine law or some other special branch I feel confident I can pass'?

"The 4,000 physicians of this State are opposed to this bill (262) because it puts the stamp of approval of this State upon this false theory and puts them upon the same plane with the grand and noble profession, but we know the people of this State need protection from every form of pretender who cannot make good that which he pretends to do. If you license the osteopath, why not license the Christian Scientist or the mental healer or the Seventh Son of the Seventh Son or the natural bone-setter. They have all done some good, no doubt, but is it reasoner sense to think that because they have accomplished some good they should be licensed to practice upon the citizens of this Commonwealth?

"This is a question which deals with human life, the most precious of all our assets. Can you afford to give our people anything but the best?

"Gentlemen, I am sure if you will give this matter the careful consideration it deserves you will not hesitate a moment as to what your duty is to the people of this State."

The Johns Hopkins Hospital Report.—The superintendent of Johns Hopkins Hospital reports that during 1907 there were 4,576 patients in the hospital, 2,317 males and 2,439 females. At the close of the year there were 231 white patients and 72 colored patients in the hospital. There were 4,859 persons treated, of whom 3,779 were white and 1,080 colored; 1,466 were medical cases, 1,685 surgical, 986 gynecologic and 439 obstetric. Of these 3,543 were discharged well and improved; 107 remained unimproved; 353 discharged without improvement; 282 were transferred, and 271 died. The lowest mortality on record during the year, 5.57 per cent.

Never advise an elastic stocking in cases of varicose veins where thrombosis exists. The pressure may detach a part or whole of the thrombosis, propelling it into the general circulation.—*Amer. Jour. of Surgery.*

Current Medical Literature.

Arthritis.—Treupel, in the *Münchener med. Wochenschrift* (September 24, 1907), reports on clinical observations made on 529 patients suffering with various forms of articular rheumatism. Four hundred and seventy-one patients having acute or subacute articular rheumatism were treated with salicylates, by the mouth or intravenously, and with local hyperemia. The sodium salicylate was always at first given internally, and when this failed to be of benefit, after five or six days, it was used intravenously. If it then failed, other salicylic preparations were tried.

Of several salicylic preparations used, none acted better than the sodium salicylate. During the first two days from 4 to 6 grams (1 to 1½ drams) of sodium salicylate were given each twenty-four hours. As soon as there was improvement the quantity was reduced to 3 grams (45 grains) in twenty-four hours, and this amount continued until the temperature was normal and there was no more pain. It seemed to be demonstrated that pure sodium salicylate does no harm to the kidneys.

Besides the above medication, in all of the 471 patients the painful joints were given rest and as much immobilization as possible. The use of cotton bound around the joints and fixation by bandages and cushions also did good by inducing a local hyperemia. Hot air and venous stasis proved valuable.

Antistreptococcal serum treatment was not encouraging, Treupel believing that the general and local bactericidal treatment is met by salicylic acid.—*Jour. A. M. A.* (February 29, 1908.)

The Cutaneous Tuberculin Reaction.—Louis M. Warfield, M. D., of St. Louis, read a paper before the St. Louis Medical Society, of which an abstract is given in the *Jour. A. M. A.* (February 29), which closes with the following conclusions:

1. The cutaneous tuberculin reaction of von Pirquet is a perfectly harmless procedure.

2. All adults do not react to the vaccination.

3. It is of value in the so-called pretuberculous stage.

4. No reaction precludes tuberculosis in an active form so far as we can be sure of the results of any one test.

5. A positive reaction does not always mean active tuberculosis. It may mean a healed lesion somewhere in the body, but it calls attention to the possibility of later tuberculosis. It also draws attention to the probable tuberculous nature of the case, and a more careful examination of the patient will sometimes reveal the previously overlooked lesion.

Puerperal Sepsis, Present Treatment of.—Dr. John E. Cannaday, of Hansford, W. Va., in a paper read before the American Association of Obstetricians and Gynecologists, Detroit, Sept. 19, 1907, considered the treatment of these conditions in substance as follows: The treatment of puerperal sepsis may be said to have been pretty definitely settled and decided. The accepted treatment is neither experimental nor is it based on theoretical deductions, our knowledge of the subject strongly indicating the removal of all decomposing material from the uterine cavity. Digital exploration of the uterus should be made; by

this means one can often diagnose the case and remove the offending material at the same time. Either bleeding alone or bleeding associated with an offensive discharge calls for the use of the curette. The author prefers the wide-bladed instrument as being more effective and less dangerous. The treatment of puerperal sepsis is undecided, unsettled and unsatisfactory. Several, mostly ineffective, lines of treatment have been laid down by different enthusiasts. In the serums or the opsonins evidently lies the hope of the future. The medical treatment is expectant, symptomatic and supportive. The author lays stress on the importance of nutritious, easily-digested diet, much reliance being placed on normal saline enemata in the severer types of the disease. The various so-called specific treatments are mentioned, but none of them are deemed worthy of serious consideration. With the exception of draining collections of pus surgical measures are, as a rule, to be deprecated.

Operative Treatment of Suppurative and Gangrenous Processes in the Lungs.—Körte gives in *Archiv. für Klinische Chirurgie* (Berlin) his experience with fifty-eight cases of this kind which has convinced him that acute suppuration in the lungs, without putrid decay or formation of sequestrs, should be treated for a few weeks with internal measures. If the process then shows no signs of subsidence, and if fever persists, pneumotomy should be done without delay. The prospects are especially good in this class of cases. Acute gangrene in the lung should be treated as soon as possible by extensive opening up of the process and splitting the lung. He does not advocate operating on a bronchiectatic cavity unless it is restricted to a single lobe of the lung. In this case extremely radical measures are required: extensive resection of the thorax, extensive slitting and, if the process does not promptly heal, isolated flaps of lung tissue should be resected. The general condition and whether the focus is single or multiple are the main factors in the ultimate outcome. Twenty of the twenty-eight patients operated on for gangrene and abscess in the lung are still in good health, including ten who were operated on more than four years ago. In three instances sudden death occurred during the operation, evidently, he thinks, due to reflex action from some branch of the vagus. The fatalities with bronchiectasia demonstrate anew the rarity of cases in which conditions are favorable to operation. Only five such patients recovered out of seventeen operated on. He did not use the air cabinet for under or overpressure in any case, and is inclined to doubt whether the overpressure might not predispose to aspiration of pus into the sound parts of the lung or into the sound lung during an operation. Pneumothorax can be avoided by drawing the lung forward with forceps after a small incision has been made in the pleura. He found adhesions in all but eleven of his forty-two pneumotomies. His mortality was 28.5 per cent. of twenty-nine cases of gangrene and abscess, and 73.3 per cent. of seventeen cases of bronchiectatic cavities. All but thirteen of the total fifty-eight were men or boys; the majority were between twenty and fifty years old. Four children between four and nineteen were cured, although their lesions were extensive. The oldest patient who recovered was sixty-five.—*Jour. A. M. A* (February 29, 1908.)

Gall Stone Disease in Its Surgical Aspect.—Dr. Forbes Hawkes, at the November 18th meeting of The Medical Association of the Greater City of New York, said that when a positive diagnosis of gall stones had been made in a given case, the question arose, did the condition belong among those to be treated by medical means or by surgical ones? If we excluded those cases (and he was not at all sure that even those should be excluded) in which gall stones were being constantly passed with slight discomfort to the patient, and those in which the risk of any surgical procedure was very great from cardiac, pulmonary, renal, or arterial changes, or from a marked hyperadiposity, the speaker thought he was voicing the opinion of many conservative surgeons to-day when he said that the remaining conditions might best be treated by surgical methods. Gall stone surgery had been and was still being opposed by many medical men in much the same way that the surgery of the appendix was opposed. Gall stone patients were liable at any time to the following serious complications: (1) Abscess of the gall bladder, often with subphrenic abscess secondary to it; (2) gangrene of the gall bladder, with ensuing spreading peritonitis; (3) perforation of the gall bladder into the duodenum, stomach, or transverse colon, with occasional intestinal obstruction from the contents or from subsequent constriction bands; (4) impaction of one or more of the calculi in the common or hepatic duct, followed by obstructive jaundice and later by ascending infection along the liver ducts, resulting in abscess of the liver, localized and operable, or diffuse and beyond the reach of the surgeon; (5) chronic hepatitis and chronic pancreatitis; (6) cancer developing in the vicinity of the gall stones. Before surgeons could conscientiously recommend operation as a routine measure with gall stones, they had to show that the operation *per se* was not an extra-hazardous one and that their final results were better in the cases operated on than in those treated by medical means alone. This had now been done by many surgeons the world over, and gall stones were being recognized more and more as objects which the surgeon was called upon to remove.

Inherited Syphilis.—Lucas first discusses the three terms, congenital, hereditary and inherited, as applied to this form of disease. Congenital and hereditary he dismisses as not being universally true, preferring the term inherited, as implying only something derived from the parents which is detachable, like a fortune or misfortune. He describes the *Spirochoeta pallida*, which is now generally accepted as the cause of the disease, and the discovery of which now puts inheritance from the father alone entirely out of court, as well as the possibility of the infection of a mother by her syphilitic fetus; for it seems impossible that a highly motile organism exceeding in length the diameter of an ovum, could possibly penetrate and multiply in it without destroying it. Therefore he lays it down as an axiom that inheritance is invariably through the syphilized mother, which conclusion is supported by Colles' law. When virulent the spirochetes penetrate the chorion or placenta and occasion miscarriages, macerated fetuses or premature births; when the virus is attenuated the placenta protects the developing fetus, and infection takes place only through the umbilical vein on the separation of the placenta, thus explaining

the appearance of secondary symptoms in the infant from two weeks to three months after birth. In these cases the separation of the placenta is the first stage, and corresponds to the chance of acquired syphilis. This is equally in accordance with Colles' law, which has hitherto been explained on the theory that during gestation the mother becomes mildly syphilized through her syphilitic child inheriting from the father. With regard to transmission by milk he reproduces an important case, reported by him in 1881, in which a mother having borne a healthy child in December, was inoculated by her husband at the subsequent Easter with syphilis, but continued to nurse her child for three months after infection before any treatment was begun. Yet for two years, so long as the case was under Lucas' observation, the child remained in perfect health. He concludes that the milk of a syphilitic woman, when received into the alimentary tract of an infant, need not convey any infection to the child. As to transmission by semen, it is certain that the spirochete can not be carried by the spermatozoon, though it is possible, but not proved, that it may be present in the fluid portion and become absorbed through the uterus after the disintegration of its mucous lining at a menstrual period. The question of transmission to the third generation he considers doubtful, and reports a case in which both parents showed marked evidences of inherited specific disease. Their condition was so characteristic that he sent for their child, then two months old; it showed no signs of syphilis during the period that it was under his observation, notwithstanding this double presumable inheritance.

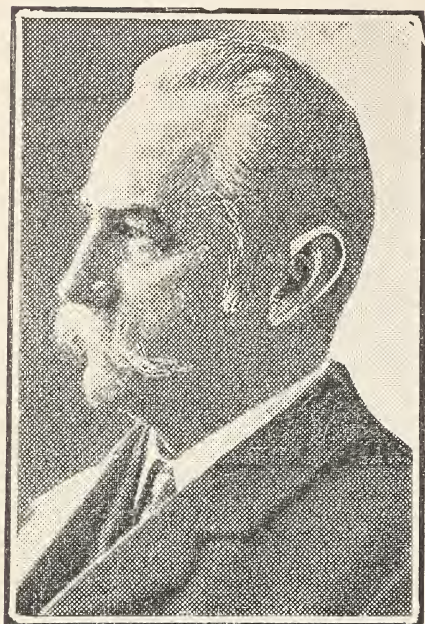
Lucas discusses infant mortality, the relation of various organs, as well as nervous changes, etc., to syphilis, and insists on the importance of weighing carefully all the evidence before determining that a particular affection is due to inherited syphilis. Every conceivable defect has been ascribed to it, and the term parasyphilis only adds to the confusion.—*The London Lancet* (February 1, 1908.)

The Treatment and Prognosis of Suppurative Cystitis.—Dr. Victor C. Pedersen, of New York, read this paper at the Medical Society of the State of New York, annual meeting, January 28, 1908. Because of the time allowed him, he said he would consider only chronic cystitis. Chronic inflammations depended upon the character of the cause and the degree of the effect. If the cause was removed a total recovery might take place if the membrane had not been deeply damaged. The cystoscope would reveal the extent of the impaired membrane. In chronic cystitis many of the causes might be removed by dividing strictures, or dilating them, calculi might be removed from the bladder, hypertrophy of the prostate reduced, or the gland removed, etc. Cases of chronic cystitis could not be cured when associated with disease of the spinal cord, or injuries there, which resulted in a trophic cystitis; neither could tuberculosis or cancerous cystitis be cured. The measures adopted were local and constitutional. Good hygienic surroundings, exercise, sleep, diet, drinks, stimulants, hydrochloric acid and pepsin, or pancreatin, were all of value. The bowels required washing. Turkish baths were good. When there was any cachexia or diathesis, it should be corrected. All diseases, especially of the heart, should be managed. When the cystitis

was practically well change of climate should not be forgotten. Digestive fatigue, nervous fatigue, physical fatigue, and other fatigues should be guarded against. The local effect of the constitutional treatment was the same for chronic as for acute cystitis. He favored diluting, acidifying and antisepticizing the urine with water and medication. If there were no casts in the urine urotropin could be used with benefit. Sandalwood, copaiba and oil of gaultheria, alone or combined, was of value. All bladder stimulants were to be avoided. Irrigations, instillations and drainage by catheter, or perineal or suprapubic section had their place. Irrigating the bladder aimed at aiding nature in eliminating the mucus, pus and debris; it combated infection and stimulated and healed the inflamed mucosa. Forcible distention of the bladder should not be done. The use of a hand syringe was recommended by which the pressure could be more easily determined. Normal saline solution, sodium carbonate solutions, or even sterile water irrigations might be used until the fluid that appeared returned clear as inspected in the test glass. The posture of the patient should be such as to get a free outflow of urine. The temperature of the fluid used might be raised with advantage. The amount injected should be measured. No pain should be given the patient. A bladder with a large amount of residual urine might hold from eight to ten ounces of fluid without distention. One should always run in just enough to unfold the crevices in the bladder. The irrigation combated decomposition and fermentation. In chronic cystitis the strength of the solution should be increased gradually, and a small amount of the solution should be left in, about one-quarter or one-half the usual capacity. These irrigations also stimulated and healed the diseased mucosa. The repetition of the irrigations depended upon the return of the symptoms. One irrigation a day usually sufficed, and then the intervals should be increased to two a week or every third day. If the combined results of local and constitutional measures were of no avail, then the operative work was to be considered. He emphasized the importance of the cystoscopic examination in all cases before giving a prognosis.—*N. Y. Medical Record*, Feb. 1, 1908.

McBurney's Point.—Sturmdorf, in the *N. Y. Medical Journal*, January 18, challenges the correctness of the claim that the establishment of the maximum pain at McBurney's point is pathognomonic of appendicitis, and asserts that it is equally true that appendicitis may exist in its absence and that a typical McBurney point may be present when the appendix is not involved. In the light of MacKenzie and Head's amplification of Ross's researches, a McBurney point, in common with every other localized pain area, may represent either the direct pain focus of a disturbance within its own area, or the reflected pain focus of a distant lesion. The differentiation is to be made by first examining the skin area superficially by Head's method, and then following with McBurney's, for by using McBurney's method alone a locally intense pain will be found, whether the pain be of local origin or reflected. Sturmdorf further repeats McWilliams's assertion that there may be primary typhlitis independent of appendicitis, dysentery, actinomycosis, or cancer, and that it may be due to coprostasis or may be idiopathic. He bases his remarks on 208 cases observed in public and private practice during a period of three years.

Obituaries.



Printed by courtesy of the Newark, N. J., News.

DR. JOHN B. PROBASCO.

By the death of Dr. John B. Probasco, who passed away at his home in Plainfield, on February 25th, the profession loses one of its well-known and much-beloved members. The doctor succumbed suddenly to an attack of angina pectoris after having attended to his practice as usual during the day.

He always gave freely of his time and energy to his patients, showing the same faithfulness and conscientious care to rich and poor alike, and was respected by all who knew him for his thorough honesty and strict adherence to duty.

Dr. Probasco was born in Cumberland County, N. J., in 1842. He studied at Bucknell University, Lewisburg, Pa., and graduated from that institution in 1864. During his senior year with most of his class he entered the Northern army, joining the 28th Pennsylvania Regiment Volunteers. Later he entered the medical department of the University of Pennsylvania and graduated in 1869, coming at once to Plainfield after graduation. For three years he was in partnership with Dr. Lewis Craig, and after that practised alone till five years ago, when he took his son, Dr. Norman Probasco, in partnership with him. He was twice married and leaves a widow and two sons—Dr. Norman Probasco and Walter Probasco, a lawyer, living in Chicago.

Dr. Probasco was prominent in the affairs of the First Baptist Church, holding the office of deacon for over twenty years. For the past fourteen years he was President of the Board of Education in Plainfield. Since the founding of Muhlenberg Hospital, over twenty-five years ago, he had served on the staff, first as visiting surgeon and later as a consulting member.

MACWITHEY.—Dr. Amasa A. Macwithey, for over fifty years engaged in active practice in Northern New Jersey, died at his home in Pompton, Morris County, January 6, 1908, from complications incidental to a fracture of the neck of the femur.

Dr. Macwithey was born in Saratoga County, N. Y., December 15, 1819; studied medicine under Dr. Isaac A. Smith, of New York City, graduating from the University of the City of New York in the class of 1843, and after practicing in the city a few years, located at Pompton in 1850, continuing there until the time of his death. For many years he was almost the only physician in that section, and his work was necessarily scattered over a large territory. He was a close student, and by diligent reading kept abreast the advances made in the science of medicine. He devoted all his energies to his work, and although his practice was arduous in the extreme, long rides over very rough roads, he was always cheerful, urbane, and ever ready to respond to the call of the sick and afflicted. He was a successful practitioner, and for many years was the honored and respected family physician in many of the best homes of the section. He continued in active practice up to within a few years of his death. Dr. Macwithey was a member of the Morris County Medical Society for a great many years, and was made an honorary member of that Society after retiring from active work. He was prominent in church work, having been an officer in the Pompton Reformed Church for many years.

H. V. DAY, M. D.

Book Review.

SURGICAL THERAPEUTICS. By Emory Lamphear, M. D., Ph. D., LL. D., St. Louis, Mo. Clinic Publishing Co., Chicago. 1907.

This little book is a condensed compend of the author's opinions, derived largely from personal experience in the non-operative treatment of surgical affections. It will therefore meet the needs of many physicians who do but little operative surgery and yet meet with many surgical cases. The border line of operative and non-operative treatment is often crossed by the author and this will increase the value of the book as a guide to the general practitioner. The article on "Hyoscine-Morphine Anæsthesia" is of special value, coming from one who has had large experience in its use and confirming the opinions of hundreds of physicians who have used it with satisfactory results.

COMMON SENSE AND THE BABY. A Book for Mothers. By Thomas N. Gray, M. D., of East Orange, N. J., attending physician to the Medical and Children's Wards of St. Mary's Hospital, Orange, etc.

This little book of 94 pages and index is well named—full of common sense and one of the few books on the care and management of the baby that we can without hesitation commend. It can safely be put in the hands of the young married woman, it is calculated to remove the dread of motherhood. It wisely directs the young mother on the subjects of nursing and feeding, airing and clothing, bathing, exercise, training, teething, sleep and sickness. One of its best features is that throughout its eight chapters it recognizes the family physician as the mother's proper adviser. The last paragraph is: "Finally, you are the mother. Don't try to be the physician."

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics—February, 1908.

The number of deaths reported to the Bureau of Vital Statistics for the month ending February 15, 1908, was 3,528, an increase of 147 over the previous month.

Pneumonia caused 516 deaths, an increase of 105 over the previous month, and 72 over the corresponding period last year. Other diseases of the respiratory system show the usual seasonal increase. Pulmonary tuberculosis caused 91 deaths more than the previous month, and other diseases of the respiratory system (pneumonia and tuberculosis excepted) caused 275 deaths, while the monthly average for the past year was 185.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending February 15, 1908, compared with the average for the previous twelve months; the latter are given in brackets:

Typhoid fever, 39 (38); measles, 11 (13); scarlet fever, 50 (23); whooping cough, 24 (21); diphtheria, 67 (54); malarial fever, 1 (2); tuberculosis of lungs, 375 (312); tuberculosis of other organs, 47 (49); cancer, 126 (124); cerebrospinal meningitis, 24 (30); diseases of nervous system, 434 (393); diseases of circulatory system, 420 (326); diseases of respiratory system (pneumonia and tuberculosis excepted), 275 (185); pneumonia, 516 (271); infantile diarrhoea, 52 (204); diseases of the digestive system (infantile diarrhoea excepted), 174 (203); Bright's disease, 220 (212); suicide, 22 (31); all other causes, 651 (591); total, 3,528 (3,084).

Food and Drugs.—During the month ending February 29, 1908, 432 samples were examined under the direction of the State Board of Health, in the State Laboratory of Hygiene; of these all of the 31 specimens of milk were above the standard; 9 of the 33 of butter, 6 of the 30 of lard, 23 of the 25 of molasses, 5 of the 37 of cider vinegar, and all of the 9 of alcohol were found below the standard. Number of water samples analyzed, 64.

Bacteriological Examination for Diagnosis.—From suspected cases of diphtheria, 2,336; tuberculosis, 287; typhoid fever, 135; malaria, 7; miscellaneous, 8; total, 2,773.

PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL ON PHARMACY AND CHEMISTRY.

(Continued.)

PYRAMIDON ACID CAMPHORATE.

This is an acid salt of pyramidon and camphoric acid, $C_{13}H_{17}N_3O \cdot C_{10}H_{16}O_4$.

Actions and Uses.—The acid and neutral salts combine in the antipyretic action of pyramidon with the antihydrotic action of camphoric acid. It is claimed that in these compounds the respective action of the component is modified, the antihydrotic effect of the camphoric acid being materially increased, while the toxicity of the pyramidon is diminished. In the neutral salt, the antipyretic action of the pyramidon predominates; in the acid salt the antihydrotic effect of the camphoric acid. They are particularly recommended in the febrile conditions of phthisis, attended by profuse sweating. **Dosage.**—Neutral camphorate, 0.5 to 0.75 Gm. (8 to 12 grains); acid camphorate, 0.75 to 1 Gm. (12 to 15 grains), given in powders

or aqueous solution. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

PYRAMIDON SALICYLATE.

Pyramidon salicylate, $C_{13}H_{17}N_3O \cdot C_7H_5O_3$, is an acid salt of pyramidon and salicylic acid.

Actions and Uses.—It is antipyretic, analgesic and antiseptic, combining the activity of its components. It is recommended in rheumatic and gouty affections, neuralgia, pleuritis, etc. **Dosage.**—0.5 to 0.75 Gm. (8 to 12 grains) in powder or aqueous solution. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

QUARTONOL.

A name applied to a mixture of tonols in tablets of 0.3 Gm. (5 grains), each tablet being said to contain lime tonol, 0.148 Gm. ($2\frac{1}{4}$ grains), sodium tonol 0.138 Gm. ($2\frac{1}{4}$ grains), quinine tonol 0.03 Gm. ($\frac{1}{2}$ grain), and strychnine tonol 0.00033 Gm. (1-200 grain).

Actions, Uses and Dosage.—See Glycerophosphates. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

RED BONE MARROW.

Red bone marrow is a glycerin extract of the red marrow of bones; it contains about 2 per cent. of proteids and about 85 per cent. of glycerin.

Actions and Uses.—The value of this preparation is believed to depend on a power to stimulate the formation of the red blood corpuscles. **Dosage.**—4 to 8 Cc. (1 to 2 fluidrams) in water, milk or wine, three times a day. Prepared by Armour & Co., Chicago.

SAJODIN.

Sajodin, $(C_{21}H_{42}IOO)_2Ca$, is the calcium salt of moniodobehenic acid.

Actions and Uses.—Although containing a smaller quantity of iodine than potassium iodide, sajodin is claimed to be equally efficient. It is said to have been proven exceptionally free from the unpleasant and deleterious by-effects of the iodides. **Dosage.**—1 to 3 Gm. (15 to 45 grains) daily. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

SAL ETHYL.

Ethyl salicylate, $C_2H_5(C_6H_4.OH.COO)=C_6H_5O_3$, is the salicylic acid ester of ethyl alcohol and is analogous to methyl salicylate (oil of wintergreen).

Actions and Uses.—Sal ethyl has the same action as the salicylates, but is said to be less toxic. **Dosage.**—3 to 6 Cc. (5 to 10 minims) 3 or 4 times a day in the form of gelatin globules. Manufactured by Parke, Davis & Co., Detroit, Mich.

SALIFORMIN.

Saliformin $(CH_2)_6N_4.C_6H_4.OH.COOH$, is the salicylate of hexamethylenamine.

Actions and Uses.—Saliformin is a genito-urinary antiseptic and is recommended as a uric-acid solvent. Its action does not differ materially from that of a mixture of hexamethylenamine and salicylic acid, for it is largely hydrolysed into its constituents in the presence of water. It has been recommended in cystitis, lithiasis and bacterial affections of the urinary passages, also in gout, etc. **Dosage.**—0.3 to 6 Gm. (5 to 30 grains) in tablets or elixir. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York.)

SALIT.

Salit consists chiefly of the salicylic acid ester of borneol, $C_{10}H_{17}OH.CO (C_{10}H_{17}O) = C_{17}H_{22}O_2$.

Actions and Uses.—Salit is absorbed by the skin after inunction and is decomposed in the body, liberating salicylic acid in the tissues. It appears to be liable to produce some local irritation and eczema of a mild type. It is antiseptic. It is recommended in gout, articular and muscular rheumatism, neuralgia, erysipelas, pleurisy, etc. **Dosage.**—It is used only externally, undiluted, by penciling, or preferably by inunction with 5 to 10 Gms. (75 to 150 minims) of a mixture of equal parts of salit and olive oil. Manufactured by The Heyden Chemical Works, New York.

SALOPHEN.

Salophen, $(C_6H_4.OH.CO.O).C_6H_4NH.(CH_3CO)$, is the salicylic ester of 1,4-acetaminophenol, $C_6H_4(NHCH_3CO)(OH)$.

Actions and Uses.—The actions of salophen resemble those of phenyl salicylate (salol). It is not changed in the stomach, but is broken up in the intestine, liberating salicylic acid and acetyl-*paramidophenol*, which is not toxic, like phenol. It acts as an antirheumatic, antipyretic, antiseptic and analgesic. It has been recommended in rheumatism, gout, typhoid fever, and as an intestinal antiseptic, in diarrhea and dysentery. Externally it has been applied in psoriasis and other itching skin diseases. **Dosage.**—0.3 to 1 Gm. (5 to 15 grains), in powder, wafers or capsules. Externally in 10 per cent. ointment. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. (Continental Color & Chemical Co., New York.)

SALOQUININE.

Saloquinine, $C_{27}H_{25}OH.CO (C_{20}H_{27}N_2O) = C_{27}H_{25}O_4N_2$, is the salicylic ester of quinine, containing 73.1 per cent. of quinine.

Actions and Uses.—It is a tasteless substitute for quinine and salicylic acid. **Dosage.**—0.5 to 2 Gm. (8 to 30 grains). Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany. (Merck & Co., New York.)

SALOQUININE SALICYLATE.

Saloquinine salicylate, $C_6H_4.OH.CO.O(C_{20}H_{27}N_2O) + C_6H_4.OH.CO.OH = C_{31}H_{34}N_2O_5$, is the salicylate of the salicylic ester of quinine.

Actions and Uses.—It is recommended in acute rheumatism, neuralgia, tabes, gonorrheal inflammations, etc. **Dosage.**—1 Gm. (15 grains). Manufactured by E. Merck, Darmstadt. (Merck & Co., New York.)

SANTYL.

Santyl, $C_{15}H_{23}OH.CO.O(C_{15}H_{25}) = C_{22}H_{28}O_3$, is the salicylic acid ester of santalol.

Actions and Uses.—It is said that santyl passes the stomach unchanged, but is slowly split up in the intestines into its constituents, santalol and salicylic acid. Santyl is claimed to have the same actions as sandalwood oil, except that because of the slow liberation of santalol, it produces no irritation of the gastrointestinal tract nor of the kidneys and urinary passages, nor any unpleas-

ant odor or eructations. **Dosage.**—1.5 Cc. (24 minims) usually given in three capsules of 0.5 Cc. (8 minims) each three times a day. Manufactured by Knoll & Co., Ludwigshafen, a. R., Germany. (Knoll & Co., New York.)

SEXTONOL.

A mixture of tonols in tablets of 0.3 Gm. (5 grains), each tablet being said to contain lime tonol, 0.13 Gm. (2 grains); sodium tonol, 0.13 Gm. (2 grains); iron tonol, 0.03 Gm. (½ grain); manganese tonol, 0.015 Gm. (¼ grain); and strychnine tonol, 0.00033 Gm. (1/200 grain).

Actions, Uses and Dosage.—See Glycerophosphates. Manufactured by Chemische Fabrik auf Actien, vorm E. Schering, Berlin. (Schering & Glatz, New York.)

SIDONAL.

Sidonol $\begin{array}{c} \diagup CH_2CH_2 \diagdown \\ NH_2C_6H_7(OH)_4(COOH) \\ \diagdown CH_2CH_2 \diagup \end{array}$ $= C_{15}H_{21}N_2O_{12}$, is the normal salt of piperazine and quinic acid.

Actions and Uses.—Sidonal is recommended as a uric acid solvent in gout, neurasthenic, etc. **Dosage.**—1 to 1.3 Gm. (15 to 20 grains) 5 or 6 times a day, dissolve in water. Manufactured by Vereinigte Chemische Werke Actiengesellschaft, Charlottenburg. (Victor Koechl & Co., New York.)

SODIUM CACODYLATE.

Sodium cacodylate, $(CH_3)_2AsO.ONa + 3H_2O$, is the sodium compound of cacodylic acid $(CH_3)_2AsO.OH$, a dimethyl derivative of arsenic acid, $AsO(OH)_3$.

Actions and Uses.—The action of sodium cacodylate is similar to other arsenic compounds, but it is much less toxic than the ordinary preparations of arsenic and is also less apt to cause undesirable side effects. This superiority is due to the slow liberation of the arsenic ion in the body. The cacodylate is particularly recommended in obstinate psoriasis, pseuraleukemia, diabetes, anemia, chlorosis, tuberculosis, malarial cachexia, etc. **Dosage.**—0.025 to 12 Gm. (½ to 2 grains) in pills, hypodermically or by enema.

SODIUM CINNAMATE.

Sodium cinnamate, $C_6H_5.CH:COONa = NaC_9H_7O_2$, is the sodium salt of β -phenyl-acrylic (benzene-propenoic) acid, $C_7H_6.CH:CH.COOH$.

Actions and Uses.—Balsam of Peru, cinnamic acid and sodium cinnamate are recommended by Landerer for the treatment of phthisis, the drugs being injected intravenously under strict aseptic precautions. The effect is referred by him to an inflammatory reaction, localized about the tuberculous foci and leading to cicatrizations. He records very favorable results in well-selected cases, and other clinicians have also reported some successes, although the treatment fails very often. The sythetic cinnamate is preferred on account of its purity. **Dosage.**—0.001 Gm. (1/60 grain), gradually increased to 0.02 Gm. (⅓ grain), in 1 to 5 per cent. solution, injected intravenously thrice weekly for long periods (3 to 18 months).

(To be continued.)

The JOURNAL will be glad to print original papers from any source, preferably from members of the State Society, provided that they shall be of sufficient merit and shall be contributed to this paper exclusively.

Anonymous communications will not be published, but the name of the author of a communication will be kept secret if the editor is requested to do so.

The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer. We cannot promise to return unused manuscript.

Authors may obtain reprints of their papers at cost, provided a request for them be written on the manuscript. Matter received after the 20th of any month cannot appear in the next issue of the JOURNAL.

Journal of The Medical Society of New Jersey

Published on
the First Day of Every Month.



Under the Direction
of the Committee on Publication.

Vol. IV.—No. 11.

ORANGE, N. J., MAY, 1908.

Subscription, \$2.00 per Year.
Single Copies, 25 Cents.

THE VALUE OF SOME MODERN LABORATORY METHODS FOR THE PRACTITIONER.*

By Francis Carter Wood, M. D.
New York City.

Professor of Clinical Pathology, College of Physicians and Surgeons, Columbia University; Pathologist to St. Luke's and the German Hospitals.

A survey of the progress of medical diagnosis during the past twenty-five centuries shows two things: First, that advances in diagnosis have been largely dependent upon the introduction and the use of instruments of precision; and, second, that each step has only been completed by the aid of methods, or through knowledge derived from one of the collateral sciences. The history of medicine also shows that progress has never been constant, but has occurred irregularly in a series of waves, the first period of expansion being marked by the writings of Galen and Hippocrates, and coinciding with the first growth of the arts and sciences in Greek and Latin civilizations. With the fall of these civilizations medicine suffered an eclipse for a long period, during which the teaching of the early fathers of medicine were preserved to us chiefly through the efforts of the Arabic physicians.

A second period of advance corresponds with the Renaissance of art and literature, beginning in Italy at the Italian universities and spreading up through France, Germany and England. This period was short-

lived, and the advances made in it were but slight. The limiting of dissection prevented the growth of anatomy, and the antagonism of the church interfered with the study of pathology, so that in the course of a few hundred years much of that which had been gained was again lost to the world, though the re-discovery of the writings of the ancient Greeks and Romans greatly influenced the succeeding periods.

The third and last renaissance of medicine began with that extraordinary revival of learning and revolt against tradition and oppression, a physical expression of which was the French Revolution. The discoveries in astronomy, chemistry, physics, physiology and anatomy, made during the seventeenth and eighteenth centuries gave an impetus to medicine which we still feel.

While the ancient Greeks observed with great cleverness and used palpation and percussion, they lacked the opportunities to verify their diagnoses by autopsies. In other words, they were unable to obtain a scientific basis for their opinions. As anatomy advanced and the circulation of the blood was discovered, gross pathology became possible and a better understanding of the conditions underlying the different symptoms was obtained.

With the invention of the microscope the discoveries of Schleiden and Schwann of cells in plants and animals became possible, and in the early part of the nineteenth century Virchow laid the foundations of cellular pathology in so broad and masterly a manner that his original publications may still be read with profit by every physician. At the same period, Johannes Müller and his pupils were busily placing physiological knowledge on a firm mathematical and chemical basis against the time when Claude

*Read at a meeting of the Essex County Medical Society, February 25, 1908.

Bernard should take up the task of forming a science of physiology. Liebig and other chemists were studying fermentation and preparing the way for Pasteur. Clinical medicine, also, did not escape the stir of the time, and hospital wards and autopsy rooms contributed much that was new. The instruments for more accurate observation and recording of clinical phenomena were still, however, lacking.

The first step was the employment of the thermometer and the stethoscope, which marks one of the important stages of progress, and the work of the earlier great clinicians was accomplished with the aid of these relatively simple instruments. The ophthalmoscope and other instruments used in examining and measuring the eye have placed the ophthalmological phase of medical diagnosis on a sure and, one might almost say, a mathematical basis. The general use of the microscope in practical diagnosis does not extend over many years, because it is only since our knowledge of pathology has increased sufficiently to permit us to classify tumors, inflammatory products and blood pictures, that the microscope can be used as an aid to diagnosis. The period of the morphological study of bacteria coincides practically with the last quarter of the nineteenth century. About the same time has elapsed since Ehrlich and his pupils began the science of hæmatology as based upon the morphology of the blood, and we owe much of our progress in this subject to that great master of science, who has since turned his attention so fruitfully to serum therapy and the study of tumors. The use of chemical tests in diagnosis has been, in a way, quite analogous to the applications of the microscope, dependent upon the advances of our knowledge in physiological chemistry, and many of the erroneous ideas and unsatisfactory methods of the older practitioners were due, not to their lack of skill and industry, but to the imperfections in their knowledge of the chemical processes which go on in the human body. Even at the present time, when a large proportion of the chemical work done in the great laboratories of this country and abroad is directed to the elucidation of the phenomena of body metabolism, our knowledge is not as complete as might be desired. I have only to recall to your minds the obscurity which still surrounds the chemical pathology of three important diseases—diabetes, gout and nephritis. In no one of these conditions can we as yet feel sure that we know anything but the merest fraction of the whole.

Thus, little by little, as the growing basic knowledge in related fields permitted, a group of new points of view and new methods have crystalized into a new, fairly compact phase of medical lore, which we may designate as clinical pathology.

The title of the paper which I have the honor to present to you to-night indicates its scope. You will note that I do not include all methods of laboratory diagnosis. The subject has grown so large in recent years that it is impossible to cover even a small portion of it in the time allotted. It is, therefore, necessary to select a limited field for consideration, and I have been influenced in the choice of my subjects by the fact that within the last decade so large an amount of material has been collected on certain phases of medicine that we are ready to determine with some degree of assurance the diagnostic value of the knowledge thus secured, leaving untouched many subjects as yet of scientific interest only. The practitioner who expects to hear from me to-night of some new and royal road to diagnosis will be disappointed, for I propose to consider only such methods as have for a sufficient period stood the test of practical application, or those which promise to be of great clinical value in the near future.

If now we turn our attention more closely to the matter in hand, I should like to review hastily some of the more interesting methods of diagnosis of disease based upon the morphology of the blood. I will not take your time with a consideration of the various types of malarial parasites. Those are no doubt familiar to you all; but I have in the past few years received many slides from persons upon whom a diagnosis of malaria had been made, the results of the examinations of the smears being largely negative for two reasons: first, because malaria is a relatively rare disease even in this State, where mosquitoes are said to be abundant, and, second, because of the fact that the patient has usually taken quinin before the blood examination is made. The diagnosis of malaria should not be made in untreated cases unless parasites have been found in the blood, for they can always be found if reasonable care and patience are employed. Modern staining methods are so simple that any one can apply them and thus obtain an absolute diagnosis. The examination of fresh specimens is much less satisfactory.

I have repeatedly received slides, a mere glance at which made evident a leucocytosis, the differential count showing a high poly-

nuclear proportion. This we practically never see in malaria, and many of these cases have turned out to be obscure infections of the genito-urinary tract. Unfortunately, after quinin has been administered it is often difficult or impossible to demonstrate any parasites in the circulating blood, and here the diagnosis must rest upon clinical phenomena entirely. Sometimes, however, it is possible by making very thick smears to find a few organisms.

These thick smears are also very convenient in searching for *filaria nocturna*, infections with which are not infrequently seen, especially in persons coming from the West Indies and Panama. The blood should be spread out in a very thick layer on the slide, and after drying, fixed in a mixture suggested by Ruge which contains 2 per cent. aqueous solution of formaldehyde, and 1 per cent. acetic acid. After short immersion in this fluid, the slide may be stained with aqueous methylene blue or thionin, or with one of the special stains, such as the Goldhorn, or Giemsa, or the separate solutions of eosin-methylene azure, of which I shall speak in connection with *Spirochæte pallida*. Under such conditions, if parasites be present, they may be easily seen, as the hemoglobin of the red cell which ordinarily obscures the field, is removed by the action of the acetic acid, and only the leucocytes, blood plates, and parasites are stained.

The embryos of the *filaria* can not usually be demonstrated in the blood of persons suffering from elephantiasis, although this condition is undoubtedly due to a filarial infection. Not infrequently we find the condition in persons coming from the Southern States, but apparently in the stage in which we see the disease the lymph channels have been so obstructed that the female worm is not able to give off embryos to the circulation, or has been encapsulated and killed. So that even if large quantities of blood are taken at the proper period, between ten and two o'clock at night, we can not demonstrate the parasitic nature of many cases of elephantiasis, though the coincidence of this condition with filarial infection has been amply shown, especially in the islands of the Pacific, such as Samoa.

The necessity of a thorough working knowledge of the blood before investigating new diseases has been well shown by the assumed demonstration of the parasite of spotted fever. The publications of Wilson and Chowning¹, Anderson² and others, gave hope that the inciting agent of this peculiar disease had at last been found, and it was

thought that it belonged to a group resembling the organism which causes cattle fever, the so-called *Pyrosoma bigeminum*. Stiles³ re-investigation of the disease in the field, and his study of the specimens sent to him by Wilson and Chowning have, however, cast much doubt upon the value of the discovery, and it seems probable that these observers were working with the familiar blood platelets which have given rise to so many pseudo-discoveries in the past. The most recent example of this is the so-called *Cytoryctes luis* recently described by Siegel as the parasite of syphilis. I have during the past three years examined many specimens of blood from syphilitic persons, and have found bodies of the form described by Siegel; but in my own opinion and also in that of others the so-called parasites are only blood plates. Curiously enough, it was while searching Siegel's preparations that Schaudinn first saw the *Spirochæte pallida*. I understand also that one of the recently discovered parasites of yellow fever will have to be relegated to the same group of blood plates whose peculiar morphology has led to so much error.

The value to the practitioner of the demonstration of *Spirochæte pallida* in syphilitic lesions seems now well established. Whether the organism will ultimately be found to be the inciting agent of syphilis, it is as yet impossible to say; but all the facts which have been collected point strongly towards this conclusion. The constant presence of the spirochætes in all syphilitic lesions, their demonstration in the tissues of syphilitic embryos, the transfer of the parasites to apes with the production of characteristic syphilitic lesions, and the re-transfer of such syphilis to human beings, all lead strongly to the conclusion that this spirochæte is the organism of syphilis. Its demonstration in a fresh lesion is a matter of slight difficulty if there has been no local treatment. If, however, vigorous local treatment with dusting powders, such as aristol or calomel, has been carried out, it is very difficult to find the organism. In untreated cases, in the primary lesions, or in secondary lesions in the throat, or in skin secondaries, it is almost always possible to demonstrate the spirochæte in numbers. Much depends upon the care with which the

¹*Jour. Amer. Med. Assn.*, xxxix, 1902, p. 131.

²*Bull. No. 14, Hyg. Lab., U. S. Pub. Health and Mar.-Hosp. Serv., Wash., 1903.*

³*Bull. No. 20, Hyg. Lab., U. S. Pub. Health and Mar.-Hosp. Serv., Wash., 1905.*

preparation is made. All contaminating organisms and saprophytic spirals which are common in ulcerating lesions should be as far as possible removed by a cleansing of the area to be examined. The lesion is then gently scraped with a scalpel or sharp knife, and smears made from the scrapings. Serum should also be expressed by pressure from the lesions. In this expressed serum large numbers of spirochætes are usually to be demonstrated. The simplest method of staining is to fix the slide in strong alcohol for two minutes, then cover the preparation with a few drops of an aqueous solution of Grüber's yellow eosin. There is then added to this eosin solution still remaining on the slide about 0.5 c.c. of a one-fourth per cent. aqueous solution of methylene azure I, Grüber. The mixture of eosin and azure causes a precipitate which is the specific staining substance. After ten minutes the slide is washed off in a strong stream of water, dried and examined with an oil immersion lens.

These dyes can now be obtained in tablet form from dealers in chemicals and can be made up in distilled water as needed. Many other dyes have been recommended, but offer no advantages over this exceedingly simple procedure. The best of all is the Goldhorn mixture, which stains almost instantaneously, but unfortunately the preparation does not keep very long and it is difficult to get satisfactory samples.

The *Spirochæte pallida* is an extremely thin, sharply kinked organism, with deep curves, usually from ten to twenty in number. Most of the saprophytic spirals have a few large turns. It is, of course, necessary to familiarize oneself with the morphology of the *Spirochæte pallida* by the examination of specimens from known syphilitic lesions, before venturing on a diagnosis.

I need not detain you with a discussion of the diagnostic value of blood examinations in connection with the special blood diseases such as pernicious anæmia and leukæmia. They are so well known to all of you that I merely touch upon certain practical aspects of the diagnosis. At present it is possible to make a positive diagnosis of pernicious anæmia from the blood of an adult after several examinations have shown a fairly constant picture, with two exceptions. One is in the case of anæmia due to the parasitic worm *Bothriocephalus*, in which the changes in the morphology of the cells are identical with those of pernicious anæmia, and the other is in the case of severe

anæmias of children. *Bothriocephalus* anæmia may always be separated from the true idiopathic pernicious anæmia by the demonstration of the characteristic eggs of *Bothriocephalus latus* in the stools. A neglect of this precaution may lead to death of the patient, and I have seen a like result in cases of anæmia due to the *anchylostoma*, though the blood in these cases does not resemble pernicious anæmia, but rather a secondary anæmia.

In children a diagnosis of pernicious anæmia is rarely possible from the blood alone, because of the very marked irregularities in the morphology of the cells which may be produced in these subjects by relatively slight changes in the general health. I have seen specimens of blood containing large numbers of nucleated red cells both of the normoblastic and megaloblastic types, from which an absolute diagnosis of pernicious anæmia would have to be made if the blood had come from an adult. The children, however, were suffering from either syphilitic anæmia or anæmia in connection with rickets, or from some type of gastrointestinal poisoning. In many such cases complete and rapid recovery has been noted.

The treatment of pernicious anæmia has been most unsatisfactory if we except the claims of Grawitz, who states that he cures nearly all of his patients suffering from this disease. Such a statement necessarily throws doubt upon the correctness of the diagnosis as the treatment which he recommends does not differ essentially from that which has been frequently employed in anæmias of this type with only temporary relief.

The idea of an enterogenous toxin acting destructively on the blood or blood-forming organs has long been held by the profession and many of the studies of the metabolism of persons suffering from pernicious anæmia seem to confirm this point of view. The recent revival of the irrigation treatment of pernicious anæmia is based upon the toxin theory. Herter's investigations of the types of bacteria found in the stools of persons suffering from pernicious anæmia have suggested that possibly the hemolytic toxin is produced by the action of certain anærobic organisms on the proteid of the food. If these products are absorbed a chronic blood destruction takes place. The first reports were rather favorable; but I have followed a number of cases in which a symptomatic cure was produced, and they have all relapsed and are now either dead or in very

serious condition. It seems probable that treatment begun after the blood has assumed its characteristic megaloblastic type can not permanently influence the disease. In all probability at the time the diagnosis can be made permanent changes in the depots for manufacturing red cells have been produced. It is, however, a method which gives us fair results and undoubtedly in selected cases prolongs life by several years. It should, therefore, be used in all cases in which the diagnosis of primary pernicious anemia can be made. The technique is simple. The patient's lower intestine is washed out once or twice daily with high irrigations of physiological saline solution.

The diagnosis of leukæmia is also easy if one is familiar with the morphology of the blood. Unfortunately such a diagnosis does not help us at present in the treatment of the disease, and the results of X-ray applications, while often astonishing at first, have been disappointing in the final outcome. Occasionally a case does very badly under such treatment, and most of the patients who have been followed for a sufficient length of time have relapsed and died. I have been able to observe a number of cases of myelogenous leukæmia during the application of X-rays to the bone marrow and the spleen. As you know, the action of the rays is to destroy the white blood cells, which seem to be more sensitive to the Röntgen rays than the cells of the tissues, possibly on account of their lack of resistance due to peculiarities of their nutrition and position as free cells and the setting free of autolytic ferments which are present in the protoplasm. The leucocyte count in these cases often approaches the normal during active treatment. In one case a fall was noted from 400,000 leucocytes to the cubic millimeter to about 10,000 to the cubic millimeter, the number fluctuating somewhat from day to day. The leucocytes never, however, regained the normal proportions, and there were always present in the blood of these cases, even though marked improvement had taken place, the characteristic myelocytes upon which the diagnosis of myelogenous leukemia is largely based. A few cases have been published, however, in which the leucocytes returned temporarily to their normal number and proportions. While permanent cure can hardly be expected, the treatment with the X-rays does undoubtedly prolong life, and when combined with general treatment with arsenic and iron certainly ameliorates the patient's condition for a considerable period of time.

The diagnosis of leukæmia is occasionally of great interest to the surgeons, not as indicating an operation, but as a warning not to operate. One such early case with no symptoms except a large spleen, in which the surgeon did not think that it was necessary to make a blood examination, was removed from the operating table in very bad condition after the hemorrhage from the incision over the spleen had been checked with great difficulty. In such a case a mere glance at a stained blood slide would have prevented a glaring error in diagnosis. The examination of the blood in cases of acute lymphatic leukæmia is often of great value. The course of the disease usually resembles either an obscure typhoid fever or an atypical hemorrhagic purpura. The blood does not always give an immediate clue. The leucocyte count may be low and the lymphocytes relatively abundant, a condition which is suggestive of typhoid fever. If the Widal reaction and other typical signs of typhoid are absent, as they may be in the early course of this disease, the confusion is still greater. If, however, the blood is examined daily the number of leucocytes will usually be found to increase to 30,000 or 40,000 to the cubic millimeter, and on making a differential count most of the cells will be found to be of the group known as lymphocytes. Unfortunately the diagnosis when made avails nothing as to treatment, and involves merely an inevitably fatal prognosis. Great care should be taken, however, in these cases to avoid the error of considering a slight relative lymphocytosis as an evidence of lymphatic leukæmia. In a number of patients, chiefly children, I have found a leucocytosis of 30,000 or 40,000 in which half of the cells were lymphocytes. In one case even 60 per cent. were lymphocytes, but the blood returned to the normal after drainage of a large psoas abscess from tuberculous inflammation of the spinal column.

Whooping cough in children is also apt to give an increase in the lymphocytes, extending over a considerable period of time, even after the acute symptoms of the disease have passed, so that a child with some other type of acute infection may show a relatively high lymphocytosis. My own rule, made merely for convenience, is not to consider the diagnosis of lymphatic leukæmia unless at least 90 per cent. of the white cells are lymphocytes. This may have to be modified in exceptional cases, but it is safe rule for guidance. The total count, though put by Cabot and others at a relatively high figure,

is of much less importance. I have seen lymphatic leukæmias with 15,000 to 20,000 or 25,000 lymphocytes to the cubic millimeter; in other words, a count well within the limits of a pneumonic or even of a digestive leucocytosis.

Other methods of blood examination depend for their value more upon numerical factors than upon changes in the general morphology of the cells. Among these may be mentioned the so-called glycogen reaction, the enumeration of leucocytes, the determination of the differential relations of the types of leucocytes, and the Widal reaction. The glycogen reaction in the leucocytes as an index of infection was for a time considered of very great importance, chiefly owing to the publications in this country of Locke and Cabot. Its simplicity was its greatest recommendation. It was soon found, however, that the practical value was extremely limited, and I think that at present the method is going out of use. The reason for this is that there is no quantitative relation between the extent of the infection and the degree of the reaction.

Of much more importance, as you know, is the enumeration of the leucocytes in the blood, though the application of the method has often been carried too far by enthusiastic laboratory workers. An old friend and teacher of mine is in the habit of stating that Cabot's excellent book on blood is the most pernicious medical work ever published, because, as he says, his house physicians spend their time in enumerating leucocytes and neglect physical signs, and that by this method of diagnosis many a pneumonia escapes unrecognized. While there is much truth in such a statement, there is also a modicum of error, and no doubt a certain number of early pneumonias escape the keen ear of my eminent friend which would be detected if he were somewhat more interested in the enumeration of leucocytes and the making of differential counts. It is the old story that everything must be considered in making a diagnosis and that the results of the leucocyte counts are valuable in their place as a part of our whole vision of the patient whose disease we have to study. While the physician is less interested in leucocytosis from a diagnostic point of view than the surgeon, it is frequently of positive value.

A central pneumonia may be suggested by a leucocytosis with high polynuclears, and not infrequently a diagnosis of typhoid fever in the early stages with no Widal reaction or physical signs, is cleared up by

the finding of a very marked relative lymphocytosis. The differential diagnosis between early typhoid and appendicitis, which is not always easy, may have to rest almost entirely upon the results of a differential count. In typhoid, the leucocytes are rarely above 5,000 or 6,000 with a relative proportion of 50 per cent. polynuclears, while in a moderately severe appendicitis, the leucocytes are apt to be 10,000 to 15,000, with a considerable increase over the normal proportion of the polynuclears up to 85 or even 95 per cent. In three recent cases which have come under my observation where the surgeons disregarded this hint, an appendix was removed which showed the characteristic lesions of typhoid fever, and these cases afterwards ran through a regular course of that disease much to the annoyance of the operator, for there was actually not sufficient inflammation of the appendix to warrant its removal, especially as the abdominal wound complicated the hydrotherapeutic care of the patient.

In typhoid fever the specific poison seems to interfere with the formation of polynuclear leucocytes so that very often a complicating pyogenic infection may occur and yet the neutrophile leucocytes in the circulation may not rise perceptibly. A number of cases are recorded in which an abscess, due to the staphylococcus, formed in a typhoid case with no increase in the total leucocyte count, but with a very marked relative increase in the polynuclears. Instead of the usual typhoid proportion of 40 or 50 per cent. of polynuclears, the latter type of cells in these cases rose to 90 to 95 per cent. As soon as the pus was evacuated, the characteristic typhoid proportion was reestablished. In some cases of perforation of a typhoid ulcer or of intestinal hemorrhage during the course of the fever there is a marked leucocytosis with great relative increase in the polynuclears. In some cases, however, there is no rise, or a rise may occur without perforation, and a slight alteration in the patient's condition may leave one in doubt as to the nature of the trouble. Here a relative polynuclear count may be of value as indicating either perforation or hemorrhage and thus may lead to an early transfer of the case to the surgeon for operation.

In surgical conditions in the abdominal cavity the determination of the leucocytes is of great importance; here we do find constant and practical indications occasionally of more value than any other individual

symptom. The leucocyte count is of especial importance in connection with obscure infections of the appendix. In this condition I think it is possible occasionally to use the course of the leucocytosis and the differential count as indicating the need for operation. A striking case of this type recently came under my observation, in which one of the internes at St. Luke's Hospital was taken ill about four o'clock in the afternoon with a very slight malaise and a rise of temperature, not over 100° . The leucocytes were counted at seven P. M.; they were 7,000 with 75 per cent. of polynuclears. The diagnosis was a possible typhoid. Pain in the abdomen began about ten P. M., and was sufficient to prevent the patient from sleeping. At ten the following morning the leucocytes had risen to 9,000, and the polynuclears to about 83 per cent. The temperature was about 101° . During the morning the pain was somewhat more severe and, though the patient's general condition was good, the leucocytes had risen by one-third to 13,000, with a differential count of 90 per cent. polynuclears. The patient's facial expression showed no evidence of a septicæmia and ordinarily he would have been allowed to go on with the hope that the operation could be done in the interval. The rise in the polynuclears, however, is, in my opinion, always a suspicious symptom and polynuclear counts over 90 per cent. almost invariably indicate a severe infection or a sharp hemorrhage. This case was operated on about twenty-four hours after the appearance of the first symptom and a long gangrenous appendix was removed. There was also a considerable acute localized peritonitis without adhesions. Undoubtedly the appendix would have ruptured in a few hours with a probably fatal termination.

Another case of slightly different type may serve to indicate the use of the study of leucocytosis as an aid to prognosis. In a patient who had had a number of previous attacks of appendicitis the temperature suddenly rose to about 102° with a leucocytosis of 22,000 and a differential count of 81 per cent. polynuclears. The pulse was not very rapid and the facies did not indicate any profound poisoning. The leucocytes gradually fell in the course of two days without any increase in the polynuclears, and it was decided to wait until the infection had somewhat diminished in severity before operating. Five days later an operation was performed and an appendix removed which was the site of only an acute catarrhal inflammation. The fall in the

leucocytes in this case was of use in determining the spread and extent of the infection which could not be determined from the patient's condition, pulse or temperature. A rise in polynuclear percentage would have indicated an extension of the lesion and an immediate operation.

Another case which illustrates still another point in the behavior of the leucocytes was one in which the temperature and pulse remained low for two days with a high leucocyte count, the white corpuscles fluctuating between 20,000 and 25,000, with a differential count of 85 per cent. of polynuclears. Under these conditions one would have thought of a mild catarrhal appendicitis. On the third day the leucocytes fell rapidly with a very marked rise in polynuclears to 96 per cent. of the total. Immediate operation was performed and an appendix was found with a recent perforation and a beginning peritonitis. It seems unquestionable that the fall of the leucocytes, with the relative increase in the polynuclears, coincided with the perforation of the gut.

Such cases, I think, point the way to what we may call a conservative use of total leucocyte and differential counts, not basing the entire diagnosis or prognosis upon such factors, but using them intelligently as furnishing an index to the patient's resistance to the infection; all the while keeping clearly in mind that there may be exceptions to the rules in the symptoms offered by the blood as there are to the signs obtained by physical examinations. How often we meet with such irregularities in the general symptoms of a case. In a case of appendicitis recently seen, the abdominal pain and tenderness was entirely confined for two days to the region of the spleen. No tenderness or pain could be elicited by pressure over the diseased organ itself. Within a short time I have made autopsies in three cases of perforative peritonitis in which the condition was entirely unsuspected, the patients not even complaining of pain. In facing the results of such absolute errors in our general methods of diagnosis, do we give up palpation? Throw away our thermometers? Not at all, but neither should we give up blood counts as of no value because of an exception to what we believe is a rule. With a broader knowledge all our so-called exceptions may become capable of interpretation.

Nothing is more misleading, however, than statistics which tell you that in catarrhal appendicitis the count is from 10,000 to 15,000, that in suppurative appendicitis with

small abscesses the count is apt to be 25,000, and with large abscesses still higher, and that with gangrenous appendicitis and general peritonitis a low count is the rule. These figures may apply to average cases, but it is an individual, not an average, case upon which we have to make a diagnosis. In a recent collection made from my records of a large number of blood examinations in cases of appendicitis, I was struck with the great variability of the counts. Cases of catarrhal appendicitis, in which the lesion had been verified by microscopical examination of the organ, were found with a leucocyte count of 30,000. Other cases with considerably more inflammation of the wall of the gut showed only 10,000 to 15,000 leucocytes. The severity of the lesion is not necessarily in any way parallel with the height of the count. I think, however, that there is some slight relation between the topography of the inflammation and the leucocytosis; that is, cases in which there is a periappendicitis show higher leucocytosis than those in which the inflammation chiefly occupies the submucosal layer or takes the form of small mural abscesses. Suppurative and perforative cases show a great variety of counts, in my records from 5,000 to 40,000 leucocytes. In practically all of the severe cases, however, the relative proportion of the polynuclears was high, though a number of counts made just before death showed a great diminution in the number of polynuclears, to 70 or even 60 per cent. of the whole. This is, however, an agonal phenomenon and probably dependent upon the overwhelming action of the poison upon the circulating white corpuscles, and upon the blood-forming organs.

The number of leucocytes may give a clue to the amount of pus formed. A safe general rule is that small exudates give a high leucocytosis, large exudates a high leucocytosis, falling as the process becomes more widely spread. Post-operative leucocytosis is always valuable in suggesting an ether pneumonia or infection of the wound.

The differentiation of the leucocytes, whether with or without a total increase, is important in the diagnosis of parasitic diseases. Eosinophilia, so called, is, as you know, a very valuable diagnostic help in obscure cases of trichinosis, especially in the early stages when the disease resembles a muscular rheumatism or typhoid fever. Later in the course of the disease the number of eosinophiles may diminish as the parasites become encapsulated. Evidence of infection with intestinal parasites may occa-

sionally be obtained from the blood count. I have several times been able to suggest the advisability of an anthelmintic to my students in the College of Physicians and Surgeons, who in making regular differential counts on their own blood for purposes of class instruction occasionally note an eosinophilia. Sometimes these cases show a bronchial asthma, but twice an unsuspected worm was demonstrated after appropriate treatment. Of course, such a blood count diagnosis is only useful in early infections before the segments of the worm begin to be passed in considerable quantities.

The same blood condition is of value in helping in the diagnosis of another parasitic infection, that of *Anchylostoma duodenale*. During the past year we have made it a rule in the Vanderbilt Clinic to examine the stools of any negro who showed an eosinophilia, and by this means a very large number of patients have been shown to be harboring this dangerous parasite. Most of these negroes are from the West Indies, but some few cases have been seen from the Southern States. As you know, this worm gives rise to an intense, sometimes fatal, anæmia, and the knowledge of the presence of a large number of infected persons is important for determining hygienic procedures to prevent further spread of the disease in the United States. The parasite is not so dangerous in cities, because there are few opportunities for the embryos of the worms to penetrate the skin, which seems to be at present the most probable method of infection. But in country districts, general contamination of the soil might result in spreading the disease over a large area.

The blood of patients suffering from filariasis often shows a considerable eosinophilia, and sometimes when the parasites are few it is so difficult to demonstrate them that the search might be discontinued unless the eosinophiles furnished a hint for further investigation. I owe a positive diagnosis in a number of instances of this disease to a persistent eosinophilia which kept us at the examination of the patient's blood until finally a few parasites were found.

One of the newer technical methods for the examination of blood which has furnished results of great importance to the physician is the Widal reaction. A truly enormous amount of material has been collected in the few years which has elapsed since Widal and Gruber almost simultaneously published their discovery of the peculiar action of the typhoid bacillus when exposed to the action of serum from the blood

of a person suffering from a typhoid infection. At first, following Widal's technique, the reaction was carried out in too low dilutions. This resulted in many pseudo-agglutinations being considered as indicative of typhoid. The employment of the inaccurate dried blood method also obscured for a time the true diagnostic value of the Widal reaction. Of late years, since we have found that high dilutions of the blood must be employed in order to obtain satisfactory results we hear less and less of agglutinations in diseases other than typhoid. My own practice has been to employ dilutions of 1-40, 1-60, and 1-80, making these preparations simultaneously and observing the movements of the bacteria at intervals until an hour has elapsed. At the end of this time if in any one of the preparations the motility of the bacteria has completely ceased and practically all of the organisms are collected in small heaps, a positive report is returned to the physician in charge of the case. When there is complete agglutination with persistence of motility, this fact is reported as stated, but the term Widal reaction is not used. Such reactions frequently occur in the first week of typhoid and are present also in miliary tuberculosis, but very rarely in other diseases. It is, therefore, important to insist upon the complete cessation of motility after the clumping, especially in making reports from a municipal laboratory to outside physicians who are apt to consider laboratory methods as infallible and to blame the laboratory if the diagnosis is not confirmed by the course of the disease. If, however, a physician can make his own agglutinations or have them made for him under his supervision, these early partial reactions are of the utmost value as suggesting the possibility of typhoid fever long before a certain diagnosis can be made by any means. Such slight agglutinations as 1-20 may frequently be seen in the third, fourth, or fifth day of typhoid fever, and may indicate to the physician the nature of the disease. They are, of course, not pathognomonic, merely suggestive, but to the physician they may be very useful.

In the last ten years many thousands of Widal reactions have been carried out in my laboratory, and there are only three or four cases in which the Widal has not given a correct indication of the presence or absence of the disease. I could relate to you many interesting cases of diagnosis practically based upon the presence of these agglutinating reactions in the obscure autumnal

fevers of which we see a goodly number in New York, some of which are typhoid and some not. These cases run a short course, not over ten days or two weeks, and very rarely even the true typhoids show eruptions or enlargement of the spleen, and they are very difficult without the aid of the Widal to separate from mild colon infections or simple intestinal catarrh.

In my own experience we have had but little difficulty arising from the so-called collateral agglutinins in other infections than typhoid. These collateral agglutinins due to paracolon, paratyphoid, and other bacilli of this large group are rarely present in the blood to a sufficient extent to excite an agglutination above 1-20 at the end of an hour, so that at 1-40 agglutination is quite incomplete and would lead to no suspicion that the case was typhoid. Occasionally a good agglutination is seen in miliary tuberculosis at 1-40 or 1-60, but the persistent motility of the clumps will indicate the nature of the infection if one is careful in observing the mixtures. Agglutination reactions with the Gärtner and paratyphoid bacilli are frequently present in true typhoid even in as high dilutions as 1-40 or 1-60, so that we have given up this test as indicating an infection with these organisms. The agglutination, however, in my experience is never so high as that with the true typhoid bacillus.

Many cases of jaundice give fairly high agglutinations with typhoid bacilli. This, I take it, has been finally settled as due to a chronic infection with the typhoid bacillus, and not due to the presence of bile salts or pigments in the blood. Not all cases of jaundice give the reaction, and when we consider how frequently typhoid bacilli remain in the gall-bladder long after unsuspected infection (sixteen years in a recent case at St. Luke's) it is not surprising that a slight degree of immunity should continue, sufficient to agglutinate the bacteria. Some interesting cases of typhoid fever following cholecystostomy and removal of stones from the common duct, point to the possibility of a person harboring typhoid bacilli without having suffered from a typical attack of typhoid fever. Infection of the intestinal tract may take place from the gall-bladder after operation in such an individual. A persistent Widal is also seen in those interesting persons who are such a menace to the health of the community, the so-called typhoid bacilli carriers, in whose intestinal tracts the typhoid bacilli remain for years after the fever. A very considerable num-

ber of these persons have recently been found, and an explanation thus offered for the hitherto inexplicable small local epidemics of typhoid which occasionally arise.

With the exception of some of the cases of paratyphoid fever, agglutination in other diseases has been of but little practical value. The colon agglutination is rare, and only high when a blood infection has occurred. I have never seen it over 1-20 even though an extensive abscess with colon infection was present. The dysentery group of bacteria rarely give rise to high agglutinations, so that the reaction has to be carried out at a point dangerously near the normal agglutinating limit of human serum. It is difficult also to obtain agglutinations in pneumonia, not only on account of the slight degree of the agglutinations, but because of the difficulty of keeping alive cultures of the delicate organism which induces the disease.

Of Widal reactions with dead cultures I have but little to say. My own experience has led me to prefer live cultures on account of the advantages of the persistent motility. Others claim that the use of suspensions of dead bacteria offers many advantages to the practitioner who desires to supervise his tests personally. It is certainly easier and safer to employ such emulsions than to use fresh cultures. At present we have reports on three different mixtures of this type, one that known as Ficker's diagnostic medium, which is very favorably considered in Germany, another a suspension devised by one of the hospital internes in New York, Dr. J. H. Borden¹, which is used with great satisfaction in certain laboratories, and a third a commercial product with which I have not had entirely satisfactory results in the few tests which have been made. There is no question, however, that this method is the easier one for the general practitioner who has not laboratory facilities.

One word more as to the purely diagnostic value of the Widal reaction. No one at the present time, I think, assumes that the Widal will lead to an early diagnosis in all cases of typhoid, very often the Widal is the last phenomenon to appear and in typical cases the rash, the early lymphocytosis, the enlargement of the spleen and the general condition of the patient will enable a correct diagnosis to be made long before the Widal appears. The great value of the Widal reaction in diagnosis is not in the typical cases but in the obscure and irregular forms. Here

it may be absolutely necessary to make the diagnosis. In my own experience a Widal is almost always present in true typhoid fever during some portion of the disease. It may, however, be necessary to examine the blood every day in order to obtain it. Some patients show the reaction only for twenty-four or forty-eight hours during their entire clinical course. In my opinion the Widal has proved to be one of the most valuable and reliable of our laboratory diagnostic methods.

The term *opsonin* has been introduced by Wright and Douglas to designate certain substances present in the blood serum which render the bacteria sensitive to phagocytosis. Not only pathological serum, but also normal blood serum, contains opsonins, though there are slight differences in the two varieties in their resistance to heat, the normal opsonin being destroyed by heating for ten minutes to 60° C. The clinical interest centers in the fact that in many bacterial infections the opsonins toward the specific organism are diminished and it is possible by inoculations of bacterial cultures sterilized by heat, to raise the opsonic index and, according to Wright's theory, thereby increase the patient's resistance to the invading microorganisms. As a matter of fact, it has not yet been proved that the rise and fall of the opsonic index corresponds with the rise and fall in the patient's resistance. Wright bases his theory of the opsonic index on the fact that a suitable dose of the vaccine prepared from the organism which causes the infectious process, raises the opsonic index to that organism, while an excessive dose diminishes the opsonic index. According to the theory, in localized infections, such as furunculosis, acne, etc., while there may be ample local resistance, yet there is so little absorption from the foci into the general system that the latter does not provide sufficient antibodies to incite general phagocytosis. If, therefore, we stimulate the general production of opsonins by subcutaneous injections of bacteria similar to those causing the disease, the general improvement will react upon the local condition and thus produce a cure.

The determination of the so-called opsonic index may be made in two ways: one suggested by Simon, in which normal leucocytes are mixed with bacteria and the number of leucocytes containing bacteria enumerated. The same mixture is then made with the patient's serum. If with the patient's serum a larger proportion of the cells contain bacteria, than with normal serum, then the

¹*Med. News*, N. Y., lxxxvi, 1905, p. 485.

patient's index is high for that particular species of bacteria. If the normal serum, however, causes a higher phagocytosis than the patient's serum, then the patient's index is low. In order to avoid the normal fluctuations which occur in healthy individuals serum is obtained from several persons and mixed in equal volumes.

In Wright's method the bacteria, leucocytes and serum are mixed, and the number of bacteria present in a certain number of phagocytizing cells is determined; and this result is compared with the number of bacteria contained in the same number of cells in a mixture of normal serum and bacteria. It is easy to see that the difficulties lie in enumerating the bacteria in the cells. It is very hard to obtain accurate results with these methods. The preparation of the serum, both normal and control, the washed leucocytes and the bacterial emulsions used to mix with the serum and leucocytes, is time consuming and the slightest error may lead to serious variations in the counts. So that a fair estimate of the time necessary to determine a single index is from three to four hours. It is evident, therefore, that the practitioner can not apply this method, and that it can only be used in well-equipped laboratories in which a stock of fresh serum and leucocytes can be obtained for each day's work.

The preparation and dosage of the vaccine is also a matter of some complexity. Cultures must be grown of an organism similar to or identical with that causing the disease. These cultures must then be heated to kill the bacteria, and a dilution made based upon the opacity of the solution, so that the dosage of the dead bacteria and their vaccines can be approximately determined. This is a matter requiring a great deal of experience and technical skill. It is of course necessary to avoid giving an excessive dose of the vaccine, which may induce a fall of the opsonic index or what Wright calls a negative phase, and injure the patient instead of causing an improvement.

The vaccine treatment will thus in the future be probably left to special laboratories.

The results obtained by this form of treatment are not as yet sufficiently extensive to permit of a final judgment of the method. It has been shown in the laboratory of the College of Physicians and Surgeons that enormous errors are possible in determining the index, even by those who have spent a considerable time in mastering the

technique. Of the clinical reports, some are very enthusiastic, some negative. When we take into consideration the well known variability of the course of the disease in furunculosis, how often a person is seen who has numerous boils over a period of a year, and then suddenly ceases to have any more, it leads to the suspicion that some of these wonderful cures are spontaneous alterations in the course of the disease and not in any way due to the inoculations. It is also manifestly impossible to apply the vaccine treatment to persons who have a general sepsis, for the introduction of the vaccine would only add to the toxemia from which the patient is already suffering. Wright himself has acknowledged that the index may safely be dispensed with in the treatment of tuberculous patients with tuberculin, though we owe it to him to have shown that the proper dose of tuberculin is much smaller than that usually given and that the best results are obtained by very minute doses extending over a long period of time and accompanied by a careful study of the patient's general condition.

The use of tuberculin in the diagnosis of obscure cases of tuberculosis has recently assumed a new phase from the employment of a very dilute solution of the tuberculous toxin to produce a topical reaction on the skin or conjunctiva. The clinical value of the method promised at first to be very great. Statistics of about two thousand published cases are now available, which cases may be divided into three groups. Of persons who certainly had tuberculosis, some 91 per cent. gave a positive reaction. Of persons suspected of tuberculosis, some 60 per cent. gave a reaction. Of persons who clinically showed no evidence of tuberculosis, about 50 per cent. gave a reaction. A large number of healthy persons gave no reaction. Occasionally the reaction fails in severe or moribund cases of tuberculosis, and in a number of instances the phenomenon has been observed in typhoid fever without any tuberculosis to account for it.

The reaction consists in an acute inflammation of the palpebral conjunctiva with injection of the bulbar vessels. Occasionally a very severe seropurulent secretion is noticed. The reaction appears in about ten hours and lasts for two or three days. General symptoms, such as fever, very rarely occur.

The preparation usually employed is obtained by precipitating Koch's old tuberculin with strong alcohol, drying the precipitate, and making a 0.5 per cent. solution in phy-

biological saline. Only a small quantity of the mixture should be made up, as it rapidly spoils. It can be obtained sealed in small tubes from the European factories; the domestic product which has been widely advertised is, in my experience, of no value. A 1 per cent. dilution in saline solution of the old tuberculin (which also contains glycerin and carbolic acid) may also be used, the amounts of these preservatives not being sufficient to irritate the conjunctiva. Great care should be taken, however, not to use any of these preparations in eyes which have any chronic conjunctivitis or any phlyctenular lesions of the conjunctiva.

It is yet too early to judge of the final value of this method, and very severe reactions have occasionally been reported, going as far as keratitis with corneal ulceration and even to complete destruction of the eye. Usually, however, no serious symptoms are produced, but it is not a test to be used carelessly. It is also necessary to remember that one application renders the conjunctiva hypersensitive, so that a severe reaction may appear if tuberculin is again dropped in the eye or is subcutaneously injected, even though the subject is not tuberculous. If a purified and standardized tuberculin can be obtained, which does not in suitable cases give rise to serious lesions, we have in this so-called Calmette reaction a very valuable diagnostic method, safer and much less annoying to the patient than the subcutaneous injection of Koch's old tuberculin. The latter is always an unpleasant reagent to employ on account of the severe general reaction from which tuberculous patients suffer, and can also not be used on febrile cases; but, notwithstanding these drawbacks, it is extremely important in the diagnosis of obscure, deep-seated tuberculosis lesions.

A similar test, using the toxin obtained from typhoid bacilli, has not proved of value in the diagnosis of typhoid fever. Blood cultures and the Widal reaction are much more reliable methods.

I regret that the natural limitations of time at such a meeting as this prevent me from going further into a subject which is of so much interest, not only to those whose chief concern is with the laboratory phases of medicine, but also to those whose life interest is the practice of medicine. There are many topics which I have had to omit. But in the few moments which remain I wish to emphasize one further point; that is, that it is becoming more and more evident that in the future

there can be no artificial separation between practical medicine and the laboratory, such as exists at present. The same intellectual methods are used at the bedside of the patient and in the laboratory. We all desire to see clearly into the conditions which underlie the disease we are called upon to study. The same rules apply to investigations made with the unaided senses as to those made with the microscope. The future of medicine depends upon the successful union of bedside study and laboratory research.

TRICHIASIS*

By T. Richard Paganelli, M. D.
Hoboken, N. J.

Clinical Assistant to the New York Eye and Ear Infirmary, and Assistant Ophthalmic Surgeon to the Italian Hospital, New York City.

Mr. President and Members of the Hudson County Medical Society, I had intended to present the subject under consideration more minutely, but owing to the fact that on this evening there will be an election of new officers I have prepared the subject under consideration briefly, so that I might not occupy more than ten minutes.

I will only consider the most up-to-date treatment and will make no mention of epilation, electrolysis, illaqueation, Snellen's, Hartz's, Harlan's or Ewing's operations, but will confine myself to Briganti's modification of Scimemi's margino-plastic operation or the Italian Operation, as it is sometimes called.

In discussing trichiasis I will also make mention of distichiasis and entropion as these diseases are often found associated and coëxisting.

TRICHIASIS.

By trichiasis is meant a condition where the direction of the true cilia are changed from the normal to a position directing the hair downward and inward on the eyeball. The conjunctiva in the regressive stage of trachoma undergoes cicatricial shrinking and contracts, thus tending to draw the cilia more and more in a false direction.

It must not be forgotten, however, that the distortion and change of direction on account of cicatricial contraction of the fibres of the *Musculus Ciliaris Reolani* is directly responsible for the production of the false direction of the cilia.

*Read before the Hudson County Medical Society April 7, 1908.

DISTICHIASIS.

Distichiasis indicates a growth of new lashes in addition to the lashes already in existence. The true cause for the growth of these new lashes, according to Raehlmann, is due to the fact that the false cilia are developed as buds or offshoots of the follicles of the true cilia and primarily from the cuticle of the free margin of the lid.

His view is that a hyperæmia of the margin and an inflammation of the proliferative type are the causative factors of the development of the new hair.

ENTROPION.

Entropion is a rolling inward of the lid; the distinction between trichiasis and entropion is one of degree. The lid margin is inverted on account of cicatricial contraction and distortion of the tarsal cartilage. The evil consequence of entropion is much the same as trichiasis.

Etiology.—Trachoma, chronic blepharitis, hordeolum, diphtheria, burns and operations are the chief causes. The most frequent cause, however, is trachoma.

Symptoms, Signs and After-Effect on the Eyeball.—The rubbing of the lashes against the cornea produces a feeling as if there was a foreign body in the eye. Pain, lacrymation, blepharospasm and ulceration in consequence of the constant irritation occurs. Later on these opacities undergo a sort of callous thickening and in this way the cornea is protected from external injury by fresh rubbing.

In order to better understand Briganti's operation it will not be out of place for me to briefly describe Sciemmi's operation.

The original Sciemmi's margino-plastic operation consists of an incision of the margin of the lid as long as the trichiasis requires, sufficiently deep to permit the insertion of a skin flap from the outer surface and a few millimeters distant from the border. After the flap is dissected it is inserted into the marginal wound. Two vertical cuts, one on each end, through the thickness of the ciliary border, are required in order to insure an easy resting place for the flap.

Sgrosso modified this operation by abolishing the vertical cuts and shifting the flap by rolling it over the lashes. The flap was left attached to the skin for a few days to insure nutrition of the graft; until it was securely attached, then it was cut at either end and the operation was complete. It appears to me that the flap might perish by removal of the vertical cuts and by bridging it over the lashes, as there is a good deal of tension and pressure on either

end that might cause a necrosis of the flap before it could attach.

BRIGANTI'S TRANSPLANTATION METHOD.

In order to overcome the difficulty above mentioned, and in order to avoid the use of the Jäger horn plate lid holder Dr. Briganti of New York has modified and simplified the operation by constructing two new instruments, which could control the hemorrhage and at the same time insure a firm hold on the lid, no matter how deformed the lid may be. It will be remembered that the hemorrhage was controlled by finger pressure and the holding of the lid in proper position was quite a difficulty in the old operation.

THE MARGINAL FORCEPS.

The marginal forceps are made right and left as is required. This forceps is intended for the marginal incision. They are like a fixation forceps up to the elbow, at which point they form an angle of about 125 degrees with the attached portion of the angular pieces. These are about twenty millimeters long and are curved slightly from side to side, so as to adapt themselves to the curvature of the lid from one canthus to the other. The inner surfaces of the angular pieces are corrugated so as to insure a firm hold on the lid. The one corrugated on the convex border should be inserted under the lid, so as to come in contact with the tarsal conjunctiva, while the other presses on the outer side of the lid. The angular pieces should be placed about four millimeters from and parallel to the margin. When so applied it is fixed and rotated upward, about twenty-five or thirty degrees, so as to bring the margin in position to the best advantage of the surgeon. An incision three millimeters deep is made between two imaginary lines, one corresponding to the lashes, the other to the excretory ducts of the Meibomian glands.

When the patient has been subjected to epilation the surgeon should wait until the faulty lashes have grown, so that he can bring these lashes outward by including them anterior to the incision. No trouble has arisen even when the incision fell on the line of the Meibomian glands. This is a common occurrence in cases where trichiasis is accompanied by pronounced entropion and atrophy of the margin of the lid. Secretion of the Meibomian glands is supposed to interfere with the attachment of the flap. However, a slight curettement of the part will remove this obstruction.

THE FLAP FORCEPS.

Having completed the marginal incision

in its details, the flap is cut with the flap forceps, which is a forceps carrying on one branch an oblong ovoidal plate, which is curved from side to side so as to adapt itself to the curvature of the lids. The other branch terminates in a narrow piece about twenty-five millimeters long and a little more than one millimeter wide, attached at its middle. It is shaped so as to follow the outline of the margin, and curved from side to side to adapt itself to the curvature of the lid. The lid surfaces are serrated so as to hold the lid firmly.

The plate is placed beneath the surface of the lid. The narrow transverse piece is placed about three millimeters from the margin and the screw arrangement tightened. The surgeon now makes an incision on the integument covering the lid along the margin of the narrow piece, acting as a guide. Careful attention should be paid that the resulting skin flap is attached at the extremities.

The instrument is now removed and the lower incision is completed at its middle. The flap is now carefully dissected and deprived of as much as possible of the superfluous subcutaneous connective tissue. The marginal incision is now refreshed so as to bleed, and the flap placed in position. Two vertical incisions of about five millimeters long, one on either end, are made, so that the flap is made to settle with less tension at the extremities.

It will be noticed that when the flap is placed in position the ciliary border is rotated outward as far as the thickness of the flap permits, thus removing the lashes from the eyeball. The skin wound is now sutured by a continuous or interrupted suture, as the surgeon desires, and an antiseptic vaseline dressing is applied.

I have assisted in fourteen private cases in the last three years and have seen four operated on at the New York Eye and Ear Infirmary and two at the Italian Hospital of New York City. Of the cases that I could keep in touch with the results were very satisfactory.

The greatest immediate danger after a tracheotomy is the possibility of a subsequent pneumonia. This can, in a large measure, be obviated by filtering the inspired air through a soft sponge saturated with warm one per cent. phenol solution.—*Amer. Jour. of Surgery.*

Every case of intestinal obstruction of obscure origin should be inquired into closely with reference to a previous history of cholelithiasis. If a definite history of this is obtained, it is well to suspect obstruction by a gall stone.—*Amer. Jour. of Surgery.*

THE RELATIONS OF THE PHYSICIAN AND THE PHARMACIST TO THE UNITED STATES PHARMACOPOEIA AND NATIONAL FORMULARY.*

By William C. Anderson, Ph. G., Phar. D.

Dean and Professor of Pharmacy, Brooklyn College of Pharmacy.

The relations of the physician and the pharmacist to the United States Pharmacopœia and National Formulary can be estimated by the part each has taken in their introduction, compilation and development, and the assistance these books render each practitioner in carrying out the noble work of his profession. The crude, unscientific and unprofessional methods employed in the practice and dispensing of medicine before the introduction of national standards, and the great developments in accuracy, science and professional standing that have taken place since their adoption, prove conclusively that such standards have provided the foundation for the advancement and elevation of the physician and the pharmacist and the greater comfort and safety of all mankind.

History records the fact that the United States Pharmacopœia was introduced for and by physicians in order that they might get away from uncertainty and treat disease more accurately and scientifically. The minds that were able to see the necessity for the development of their practice on more scientific and professional lines, by the recognition of standard drugs and preparations could not fail to recognize the fact that the keeping, preserving, making and dispensing of these standard drugs and preparations constituted a distinct line of work and scientific practice which belonged to those who were using as great efforts to make their chosen profession an honor to themselves and a benefit to mankind, as the physicians were to elevate their standing and give better and more satisfactory services to the public, and when the 1850 edition of the United States Pharmacopœia was about to be considered the pharmacists accepted the invitation of the physicians to join with them in the preparation of the new book, and each ten years since, some

*Read at a joint meeting of the Morristown Medical Club and the pharmacists of Morristown, at the residence of Dr. H. Vaughn, March 25, 1908.

of the most able men and women of both the medical and pharmaceutical professions have met in convention and improved the official guide for physicians and pharmacists; the last revision being the most scientific, comprehensive and valuable work of its kind ever published; containing 958 articles that have been selected for their medicinal value to fulfil the requirements of the physician. This number including crude drugs from the mineral, vegetable and animal kingdom, and the preparations made from them. All brought to the highest standard of purity and perfection.

The other guide to the ethical practice of medicine, the National Formulary, is also the result of the combined efforts of physicians and pharmacists. It was introduced to meet a popular desire among physicians for combinations of drugs and preparations, for the relief of specific ailments, that would have a nice appearance and pleasant taste, and yet be free from any mystery as to their constituents. This desire on the part of physicians was stimulated by the increasing growth and activity of manufacturing concerns, who were marketing products of unknown composition with coined names under the title of "elegant pharmaceuticals," and the physicians wished to take advantage of every progressive movement that would add to their convenience, without being detrimental to their patients or their own reputation as ethical practitioners, with sufficient knowledge and training to enable them to choose the drugs best suited for any case they might be called upon to treat, and enough sound judgment to cause them to withstand the temptations and alluring appeals of those who would drag them into the fold of supporters and prescribers of nostrums. The National Formulary contains some 450 ethical preparations of value to the physician, the exact composition of which he is familiar with and absolutely sure of, for the maker of National Formulary, as well as United States Pharmacopœia preparations (the retail druggist) is compelled by law to maintain definite standards of composition, strength and purity.

Compare these conditions with those surrounding the manufacture of secret remedies, and consider the freedom with which a manufacturer of such remedies can manipulate his product to suit his commercial advantages, use pure or impure drugs, publish a list of constituents and then, placing attractions such as appearance, taste and stability above medicinal activity by "scientific procedure," change the nature of the

same, and little argument is needed to show the thoughtful and careful physician which class of remedies he can prescribe with the greatest safety to his patients and his own reputation and welfare.

It is natural to suppose that those who have taken an active part in building up any great enterprise will keep in close touch with it, and be deeply interested in its progress and success. Yet we may recall many instances where men with the very best intentions and regard for justice and honor, have been led from the path of right and duty into conditions that were detrimental to themselves, as well as things they were in duty bound to remember and support, by influences that magnify temporary advantages and make one blind to ultimate results. If the physician and the pharmacist had only the present to consider, and their only object in life was to secure the almighty dollar, which, I am sorry to state, appears to be the case in some instances, there would be little use in spending time at such meetings as this, or attempting to free each profession from the disagreeable, unjust, and in many instances unwarranted practices that have crept into them, but I feel that, while professionalism must depend to some extent upon commercialism, every physician and every pharmacist who is worthy to be so called, has a higher and nobler aim in life than the mere accumulation of wealth and that each holds his reputation, citizenship, position in society and the progress and honor of his profession above all other considerations.

When we consider how nearly identical physicians and pharmacists are in their attitude toward their respective professions, the value of such a foundation for the development of the same, as the United States Pharmacopœia and National Formulary, and the active part each has taken in establishing and strengthening that foundation, the difference in the general attitude of the two professions toward these works seems strange and requires careful investigation as to the cause and the development of a just and effective remedy. For it must be apparent to all that, while the pharmacist has been using his best efforts to make the United States Pharmacopœia and National Formulary the power for good it was intended they should be, in too many instances the physician has gradually lost sight of their purpose and value. The pharmacists have made them the most important textbooks in their colleges, compelled all who practice pharmacy to be familiar with them,

required, by-laws enacted by their advice and through their influence, that every pharmacy shall be provided with the latest editions and that all drugs and preparations sold or used in compounding physicians' prescriptions shall conform to their requirements in constituents, purity and strength, and they have used much time and money to place themselves in a position to give to the physician and the public prompt, efficient, honest and honorable service.

In the meantime, if we have been correctly informed, physicians have not been encouraging the study of the United States Pharmacopœia and National Formulary in their colleges, to the extent their importance to the ethical and successful practice of medicine would indicate, and until very recently, when many awoke to a realization of the unenviable position into which their profession was drifting and the American Medical Association and a number of local medical associations became active, little or no efforts were put forth to stimulate their use among medical practitioners. The latest editions of these works were seldom found in the physician's office, and the older editions were usually found buried under the "literature" (more commonly known and recognized as advertising matter) of the nostrum manufacturer and samples of his merchandise.

Physicians as a rule have failed to recognize the assistance that true pharmacy, conducted under the regulations of the United States Pharmacopœia and National Formulary, is to them and have not given the support and encouragement to which the pharmacist is justly entitled. Numerous reasons have been given for the apparent disinterested attitude of the physicians toward these standard works and the practice of pharmacy. Most of these make him appear to be assuming an attitude of retaliation, because of imaginary or real acts on the part of pharmacists which encroach upon his field of privileges and duties, or deprive him of the right to be the only judge of what is best for his patients.

Chief among these are counter prescribing, the sale of patent medicines and substitution. Counter prescribing by pharmacists has been so strongly condemned by many physicians that the simple use of the term appears to raise a red flag before some physicians' eyes, and they imagine that every one of their patients who enters a drug store to purchase a postage stamp is going to leave with the pharmacist the fee which rightfully belongs to the physician. The

trouble is, counter prescribing is such a broad term that it can be made to place the pharmacist in the most disagreeable and ridiculous position by one so inclined, or relieve him of the responsibility for the exercise of other than the most simple and harmless practice by one who desires to do so.

Under the head of counter prescribing it is possible for a pharmacist to practice medicine to an extent that is unjust to the physician, illegal, and dangerous to the public; in fact, absolutely criminal; at the same time his knowledge of drugs, the peculiar nature of his business and his relations to the public makes it impossible for him to conduct his business without answering questions and giving advice in such a way as to be considered guilty of counter prescribing by those who cannot, or will not, recognize his true position. What is needed at this time is a just and reasonable definition of what shall constitute counter prescribing, as objected to by physicians, and a distinct understanding as to what suggestions and recommendations as to the use of drugs a pharmacist can make without being considered a counter prescriber. I do not believe a pharmacist has a legal or moral right to examine a customer, attempt to determine the cause of illness and prescribe therefor, but that he has a perfect right to give a correct answer to questions in reference to the action of drugs and preparations and sell those not restricted by law.

Self-medication through the manufacture and sale of patent medicines is a subject that can be discussed from many standpoints, and one that cannot be satisfactorily settled without the exercise of much patience and consideration. The physicians who first opened their medicine shops for the sale of medicine, the constituents of which were unknown to any one but themselves, and which they advertised to the public for general use in common ailments, could not have imagined what a foundation they were laying for the development of gigantic enterprises that would obtain such a firm grip upon the public and become so objectionable to those who followed them in the ethical practice of medicine.

The pharmacist's position in reference to the sale of patent medicine is one that has gradually grown upon him through the activity of manufacturers, and the requirements of the public. As the most natural distributor of medicinal products, the manufacturer has used him as a means of getting his products into the hands of the public, and in turn the public has by its demands required him

to supply such remedies as they wanted. Much of the criticism that has been heaped upon him because he is a distributor of patent medicines, and the suggestions that have been made to the effect that he eliminate them from his stock, are as unjust and unreasonable as they are ridiculous, for most of the criticism has been based upon misrepresentations, and no proof has ever been furnished to show how such a radical change in conducting his business and the consequent loss to him, could accomplish any worthy object.

As long as the manufacture and sale of household remedies is lawful, they will be produced and the public will have them. I believe the best work in this line that can be done by physicians and pharmacists is that already begun by the pharmacists, at the sacrifice of much commercial advantage, and that is the absolute elimination of all products of this character that contain habit-forming drugs or are proven to be absolute frauds. Such procedure should accomplish the object sought by the physician in a most effective and permanent way, will give the pharmacist the relief he is seeking, and benefit and protect the public.

The other bone of contention—substitution—has but one side to it, for there is no room for argument as to the rights and privileges of physician and pharmacist on this subject. The physician is the only one who has a right to judge and direct what is best for his patient and the pharmacist is in duty bound to obey his instructions even in the most minute detail.

Although these subjects have been given as reasons for contention between physicians and pharmacists, I am inclined to believe that they play a very small part in moulding the actions of physicians in reference to the use of United States Pharmacopœia and National Formulary products and the nostrums. I feel that physicians are too broad-minded and considerate to attempt to retaliate for supposed offenses, about which there is so much uncertainty, and that the extensive use of nostrums by them is the result of the active campaign of advertising by personal interview, that is continually waged by the manufacturers of those products. The tendency of all busy men to save time and trouble, and of habits to grow into a common custom; and the failure of the physician to realize the detrimental effects of the practice; but now that the beneficial effects of the National Pure Food and Drugs act is being felt, deception exposed, and the physician brought to a realization of his re-

sponsibility and true position, we may look for, in fact have observed, a decided change in his attitude toward nostrums, and United States Pharmacopœia and National Formulary preparations.

As gratifying as this is to the pharmacist, I feel confident it will prove even more pleasing and satisfactory to the physician, for he will be relieved of the doubt which must follow the prescribing of preparations of unknown or doubtful composition, the criticism of the patient who frequently recognizes the coined name as that of some well known cure—all that he can purchase without paying the doctor's fee, and probably the reflection that he has done more good for the manufacturer of the nostrum than for his patient, at the expense of his best interests, and that of his co-worker, the pharmacist. Everything points to a better understanding between the physician and the pharmacist, and it is to be hoped that frequent consultation will remove all barriers, and each be found occupying his proper sphere, and working in harmony with the other, for the benefit and elevation of each profession and the welfare of the public.

THE DOCTOR AND THE DRUGGIST.*

By C. J. Mc Closkey, Pharmacist,
Jersey City.

Webster defines the physician as one who prescribes medicines. The druggist as one who compounds medicines. These are two separate and individual professions, and, as a rule it is not possible to practice both prescribing and compounding without detriment to one or the other.

There are still a few country districts where it is necessary for the doctor to dispense his own medicines on account of the lack of enough population to support a drug store, but in cities and towns it is an unnecessary evil.

There are many objections to the physician putting up his own prescriptions. Among them the fact that it would be necessary for him to do a large business; otherwise his stock would become old and unreliable. And if he did do sufficient business to move his stock frequently he would have no time to devote to the manufacture of galenicals, thereby depending on the pharmaceutical houses for all his preparations.

*Read at a Joint Meeting of the Jersey City Druggists' Association and the Hudson County Medical Society, March 31, 1908.

He does not have the facilities for dispensing as it should be done to insure accuracy, and it generally results in guessing as to quantities and a throwing of things together in a haphazard way. I can remember long ago seeing our family doctor in the village in which he lived, tear a newspaper into small pieces, place them on a table and put a small quantity of powder from each of three or four vials taken from his case, on each of the improvised powder papers. No trituration, no impalpable powder and every thing in the appearance of the package to make it taste as nasty as possible.

This unreliable and dangerous method of dispensing dry drugs has been partly overcome by the tablet, but they cannot always be depended on as to composition, are not at all times readily absorbed and are usually unsatisfactory. A tablet of *ext. digitalis* will not have the action of an infusion made from Allen's *digitalis* leaves.

The physician rarely if ever keeps a record of the remedies prescribed and as it would be impossible for him to remember what he had given each individual patient he would be at a loss to repeat the same preparation when he found it effective and wished to continue the treatment.

Another reason is the possibility of accidental poisoning. If a mistake is made in writing a prescription the druggist stands between the physician and a fatal result to the patient and is responsible if he overlooks the error. If an accident occurs in self-dispensing there is no one to detect the error until too late.

But the greatest objection to office dispensing is substitution, the great crime of which the druggist is accused by so many manufacturing concerns. The physician on making his diagnosis would decide in his own mind the proper medication to use, but if it happened that he did not have the drug or drugs in stock he would naturally dispense any substitute at his command, whereas if he had written a prescription the patient would have received the medicine necessary to his case. It would always be a matter of using what was most convenient or "just as good" instead of what was necessary.

THE DRUGGIST COMPOUNDS.

Preparing the prescription as the physician directs and carrying on the commercial side of the drug business as it is done to-day is the duty of the druggist. Up to a certain point the druggist must have as much knowledge of *materia medica* and therapeutics as the physician. But we certainly are

not able and should make no attempt to diagnose a person's ailments.

Oftentimes we are placed in very trying positions in order to avoid the evil of counter prescribing. Particularly those of us who are located in the poorer districts and have had long acquaintance with our customers. Many people ask our advice whom we know are not able to, and probably would not, pay a physician if he was called.

When we refuse to treat them and advise them to consult their physician they very often are offended and either go to some public dispensary for free treatment, or patronize a physician who is connected with a drug store and who is supposed to give his service free, only charging for the medicine dispensed. In either case the ethical druggist and doctor lose the business.

I find, however, that in the majority of cases where they have confidence enough in a druggist, to ask him to prescribe for them, that if he will seriously tell them that he is not able to prescribe, and that it will be for their own good to consult a physician they will take his advice, and notwithstanding that we may give offence to some we should in all cases when we are asked to diagnose, insist on the patient seeing a physician.

It is also well to allow the patient to make his own choice of a physician, unless they have no preference and ask us to recommend a "good doctor". Then of course we can refer them to "our own relations" if we have any in the profession.

Counter prescribing is rarely, if ever, held out as an inducement to a customer, even by the greatest offenders among us, but is the result of the demand made by the public, for as it seems to them, economical reasons.

What might by some be designated as counter prescribing, but which we do not believe should be placed under that head, is the recommending of our own preparations for specific complaints instead of some proprietary article, which perhaps is one that has been advertised by a physician giving out the sample in his own office, or prescribing it in an original bottle or package, and which we are compelled to sell at less than a living profit on account of department store competition.

For instance, a customer calls for Fellow's Syrup Hypophosphites, an article which has attained its great sale to the public through being ordered and dispensed in the original bottle with the name plainly blown in the glass. This article cost the retailer \$12 per dozen and the majority of stores sell it at

\$1 per bottle. In gross quantities the discount is only 10 per cent. making it cost even the large buyer 90 cents per bottle.

Under these circumstances if the customer asks us any question regarding the virtues of Fellow's Syrup we can see no objection to recommending a bottle of our own or N. F. Hypophosphites which will cost the customer less than Fellow's and on which we can make a living profit. The retail druggist must take the commercial side at this point if he wishes to pay his rent and provide for his family.

The public cannot be compelled to consult the physician for every small ailment, either real or imaginary and they *will* purchase advertised remedies. We feel that in these cases we should be allowed to recommend our own preparations instead of the cut rate article.

THE RENEWING OF PRESCRIPTIONS.

The physician frequently orders his patients to have their prescriptions renewed. In many instances he will order his patient to continue the treatment indefinitely.

This matter is no doubt many times carried too far, but if the physician will designate on the prescription he may write "do not repeat" we will carry his instructions out to the letter, and no druggist with any feeling for humanity will continue to renew a prescription containing a narcotic without specific instructions from the physician.

That the present movement in favor of getting back to the prescribing of Pharmacopœial and National Formulary preparations is making great progress is being proved by the action of the large pharmaceutical manufacturers. They are flooding the druggist with literature regarding their facilities for making N. F. and Pharmacopœial preparations. They see what is coming and want to take what advantage of it they can. But we believe it proper that druggists should make their own preparations and should be held individually responsible for their purity under the Pure Drug Law.

If the manufacturers are able to carry out their intentions along these lines the situation will not be much improved for in the end we would have ten different doctors prescribing as many different makes of Pharmacopœial and Nat. Form. preparations and the druggist would have to carry the full variety in stock with the resultant loss in deterioration from age in those seldom used. This is a situation we particularly wish to avoid.

The main thing I wish to impress on the minds of my brother druggists is to be pre-

pared to furnish these preparations when called for. I heard of a case the other day which happened in Union County, this State, of a doctor writing for one of the National Formulary preparations. The druggist called him on the 'phone and said he had never heard of such an article and wanted to know where he could get it.

The doctor had his National Formulary on his desk and called the druggist's attention to the page on which the formula was printed. The druggist said, "Oh! I haven't that book," and said that he had not been able to find it in his 1890 Pharmacopœia, and therefore thought there was no such preparation. Happenings of this kind will work havoc to our movement.

Be up to date. The smaller the store and the less business done, the more opportunity the druggist will have of reading up on these preparations.

In Union County of this State there is to be published an ethical list of druggists. The requirements being that a druggist to be eligible to have his name on the list must have a copy of the latest National Formulary and Pharmacopœia, be a member of the National Association of Retail Druggists, and also of the local association and have his dues paid to date in each. This, I think, would be a good example for us to follow, as it would have a tendency to increase our membership and to enlist the efforts of many druggists in the propaganda movement, who up to this time have seemed to take no interest.

The detail work of the manufacturers in the past and the sampling of the physician has been the cause of prescribing of proprietary articles. The druggist has sat still and allowed the manufacturers to influence the physician at the loss of the druggists' prestige and profit.

It is now up to the druggist to do some detail work for himself. Let every druggist talk National Formulary and Pharmacopœia preparations to his personal friends among the doctors; let him show the doctor his preparations and let him demonstrate their palatability, appearance and the accuracy of their compounding. Let him send samples to the physician's office. There is no question but what the sample on the physician's desk gives him an objective impulse to prescribe the article. It is human nature for him to use the article that appeals to him at the moment.

I think it safe to say that the prescriptions written for proprietaries in the office are ten times the number written in the

homes of the patients, for in the home of the patient the doctor lacks the objective impulse of the sample package. Give doctors samples and convince them that they should trust you, the man of their personal acquaintance, rather than an unknown manufacturer. Convince him that you only use drugs that are pure and assure him that he will get the results looked for by their use.

A FEW REQUESTS OF THE PHYSICIANS.

Write legibly. Much time is lost in deciphering prescriptions, particularly when written by one whose handwriting is unfamiliar.

Be specific in your directions. We are frequently embarrassed by patients asking us how to take this or that, for we are unaware as to your intentions in the matter and do not want to conflict with your instructions.

When a patient does not always satisfactorily respond to treatment, do not put the blame on the medicine unless the druggist is actually at fault.

Do not set a price as to what we should charge on your prescriptions, any more than you should expect us to put a value on your services.

Do not order a new preparation without first notifying the druggist. It often entails a long wait by the patient for needed medicine, and it is an absolute impossibility for the druggist to put in stock every new thing that is put on the market, for many of them are never called for at all.

If you must prescribe proprietaries, do not order them in original packages. It is not only bad for the druggist, but often has a tendency to lower the opinion of the patient of his physician.

The public look on all proprietaries as "patent medicines," and naturally think that they are able to buy patents without paying a physician a dollar to order them.

When we send you a patient suffering from venereal disease do not supply him with capsules and tablets and tell him he can buy a glass syringe from the druggist. Let us supply the medicine and we will send you the patients with more satisfaction and without detriment to our cash account.

A FEW SUGGESTIONS TO THE DRUGGIST.

Do not criticise a prescription in the presence of the customer. If there is anything which requires consultation with the physician, tell the customer you will send the medicine and call the doctor on the telephone after the customer has left the store.

Do not try to enhance yourself in the eyes

of the customer as to your ability to find mistakes at the expense of the physician.

Be conservative as to your praise of one physician above another, as you would not want the other physician to praise some druggist over you.

Read your Pharmacopœia and National Formulary and be prepared to fill prescriptions for their preparations when they come in. If we expect the physician to prescribe them we certainly should be familiar with them and carry them in stock.

Above all, bear in mind that if there is any possibility of inducing a customer to consult a physician for his trouble that there is more profit in the physician's prescription than there is in our "Canada Pines" for coughs and colds or our "Wonder Workers" for rheumatism.

IMPROVED YELLOW OXIDE OF MERCURY OINTMENT.

By Talbot R. Chambers, M. D., Jersey City.

The Yellow Oxide Ointment has been and will continue to be a most universally employed medication the world over. It is recommended in all the works on diseases of the eye. It has always proved very efficient but had one great drawback, so serious that some individuals have preferred the disease to the pain experienced in the use of this salve.

The improved ointment is made as the United States Pharmacopœia directs, except that the precipitate is not allowed to dry before mixing with the grease. Thus dissolve 25 grammes of corrosive chloride in 250 grammes of warm distilled water. Dissolve 10 grammes of sodium hydrate in 250 grammes of cold distilled water. Slowly mix these two solutions and allow the resultant to stand for about an hour at a temperature of about 30° C., agitating frequently. Decant the supernatant liquid from the precipitate. Wash the precipitate with distilled water until free from soda.

The precipitate, a moist magma, is placed on a cloth strainer and allowed to drain. Before it has dried it is incorporated with equal parts anhydrous wool fat. This in turn is mixed with two parts white vaseline.

If our druggists will keep this stock ointment on hand, of which four grains roughly represents one grain of yellow oxide of mercury, they may in a minute prepare any strength of ointment desired and the result will be constant—a smooth, uniform, elegant and effective ointment, which has the added virtue of being painless. By the old method of simply mixing the dried oxide with vaselin, it takes prolonged rubbing to obtain a smooth result which, after all, under a low power shows its granular condition. Theoretically, the ointment freed of its granular condition should be less painful than where the granules are present. Practically, I am able to record that individuals who found the old formula too painful register no objection to the improved style.

An obstinate constipation may be due to an extreme retroflexion of the uterus, the organ lying in the hollow of the sacrum.

PANCREATITIS RESULTING FROM GALL STONE DISEASE.

Dr. William J. Mayo, of Rochester, Minn., read this paper at the annual meeting of the New York State Medical Society, January 29, 1908. In 2,200 operations upon the gall bladder and biliary passages the pancreas was coincidentally affected 141 times. As the total of all pancreatic diseases operated upon was but 168, 81 per cent. were due to or accompanied by gall stones. In 268 operations upon the common and hepatic ducts the pancreas showed disease in 18.6 per cent., against 4.45-100 per cent. where the gall bladder only was involved. In 124 cases the head of the pancreas showed evidence of inflammation, while in but 17 was the entire organ affected. Three cases were of acute pancreatitis, nine of subacute, and 120 chronic. The pancreas lay in a most protected situation, and was little liable to intrinsic disease. Its natural defenses had but a single defect and that was the mechanical association of the main pancreatic duct with the common duct of the liver. Inflammations of the pancreas were dependent upon infections or chemical irritation. In 62 per cent. of human subjects the terminal third of the common duct was imbedded in pancreatic tissue, while in 38 per cent. it lay behind. Therefore, 62 times out of a hundred any structural change in this portion of the head of the pancreas would interfere with the liver excretion through the common duct, giving rise to jaundice, while a stone in the terminal portion of the common duct, or infection caused by stone in any portion of the bile tract, exposed the pancreas to infection. Should a stone in the common duct compress the pancreatic duct of Wirsung, the safety of the pancreas might depend upon the possible presence of a patent duct of Santorini. Or if the stone lay in the papilla, the bile might force its way up into the duct of Wirsung, and set up chemical pancreatitis. The *triangle of pancreatic inflammation* was that part of the head of the pancreas which lay between the duodenum on the right and the ducts of Santorini above and Wirsung below. The most interesting feature of acute pancreatitis concerned fat necrosis, a disseminated necrosis of fat due to the escape of pancreatic ferments which involved to a greater or less extent the omentum, mesentery, retroperitoneal, and other adipose tissues. Fat necrosis was probably the result not of normal pancreatic secretion, but rather of pancreatic juice which had become activated by associated ferments either from the bile or from the duodenal mucous membrane. Of chronic interstitial pancreatitis there were two forms: The interlobular and the interascinar. The interlobular was fortunately the one most often associated with gall stone disease. In this type the pancreas was enlarged, nodular, and rough to the "feel," greatly resembling cancer. The interascinar often destroyed the islands of Langerhans, causing diabetes.—*N. Y. Medical Record* (Feb. 8, 1908).

AN OBSTETRIC ANOMALY: AN EXTRA FONTANELLE.

Frank S. Bulkeley, M. D., Ayer, Mass.

As I have been unable to find any mention of this anomaly in the literature, I think that the following report may be of interest to general practitioners:

Patient.—Baby W., delivered at term by forceps

applied to the head at the superior strait. Position, O. L. A.

Labor.—Examinations during labor seemed to show some failure of the flexion of the head, and as the pelvis was of normal size and shape, the child apparently not large, and the pains seemingly of sufficient strength, the failure of progress was laid to imperfect flexion. Several attempts to flex the head without anesthesia seemed ineffectual, as the anterior fontanelle apparently still persisted within easy reach of the examining hand. An attempt to flex the head under anesthesia just before applying forceps was also ineffectual. Delivery was moderately difficult, and at the expense of a perineal laceration requiring four stitches, one to occlude a large anomalous artery.

Description of Child.—The baby weighed seven and a quarter pounds and was normally developed except as follows: Both anterior and posterior fontanelles were in their usual position and of the usual shape. Between the two, in the course of the sagittal suture, but nearer the sinciput than the occiput was a gap between the parietal bones, of the same shape as the anterior fontanelle, and only slightly smaller. Two fairly well-marked ridges of bone ran from the lateral corners of this, feeling much as the sutures feel when the bones are overlapped. This at once explained the apparent persistence of the anterior fontanelle within easy reach of the examining hand.

Such a condition makes an exact diagnosis of presentation and degree of flexion of the head exceedingly difficult.—*Journal A. M. A.* (Feb. 8, 1908).

COMPLICATIONS OF ALCOHOLISM.

With Some Statistics on Two Thousand Cases.

Leonard D. Frescoln, M. D., Philadelphia.

From the Journal of the A. M. A., Feb. 8, 1908.

Alcoholism in itself with its distinctive peculiarities and its varied forms, is an affection successfully managed. Indeed, the most alarming forms, as delirium tremens and alcoholic mania, respond surprisingly to treatment. It is in the accidental complications and the sequelæ of continued use of alcohol that we have cause for alarm.

In hastily running over some four thousand (4,000) cases of alcoholism at the Philadelphia General Hospital during the past three or four years, a great variety of affections were found recorded on the history papers as complications. A number of these affections it is true were merely accidental associated troubles from which the patient in some instances was suffering before his acute alcoholism, but there were a number of diseases running hand in hand with alcoholism in a great many of the cases.

The affections marked as complications and that seemed to be most reasonably linked with the alcoholism in two thousand cases were as follows: Delirium tremens (7 deaths), 49 cases; forms of nephritis, 28 cases; pneumonia, 23 cases; pulmonary tuberculosis, 23 cases; myocarditis, 20 cases; uremia, 16 cases; bronchitis, 15 cases; gastroenteritis, 14 cases; lacerations, 14 cases; valvular heart disease, 11 cases; contusions, 10 cases; leg ulcers, 9 cases; rheumatism, 7 cases; pulmonary edema, 7 cases; fractures, 7 cases; typhoid, 6 cases; confusional insanity, 6 cases; multiple neuritis, 6 cases; erysipelas, 5 cases; cirrhosis of liver, 5 cases; epilepsy, 4 cases.

There were also found, as would be expected, cases of: Morphinism, jaundice, mania, diarrhea, retention of urine, gonorrhea, pediculosis, arterios-

clerousis, scabies, hemiplegia, anemia, pulmonary congestion, pressure palsy, acne rosacea, pleurisy, cocaineism, insomnia, ordinary infections, imbecility, sprains, malingerings, hemorrhoids, constipation, orchitis, stricture of urethra, convulsions, dilated hearts, intestinal paresis, dyspepsia, burns, hepatic congestion and chilblains.

There were found to be accidentally in the same class of patients: Malaria, fistula, emphysema, dysentery, paralysis agitans, phlebitis, bulbar palsy, tender feet, contractures, goiter, asthma, saturnism, lacerated perineum, retrodisplacement, hernia, aneurism, impacted cerumen, abscesses, etc.

Head injury, hysteria, opium poisoning, epileptic convulsions, uremia and forms of insanity have to be distinguished from alcoholism; in some cases they are complications of alcoholism or alcoholism is superimposed on a previous trouble.

Mere statistics may be taken for what they are worth. It is easily seen by those who have come in contact with this class of cases and who look over the records that through carelessness, lack of observation, mistakes, lack of time, etc., on the part of those who have given over the histories as records, the numbers are deceiving. Only four cases of arteriosclerosis and four of pediculosis are recorded in two thousand (2,000). The former must be present in from 80 to 90 per cent. of our cases and the latter in 8 to 10 per cent. Of course, the pediculi in most of these cases do not come to the notice of the physician in the ward.

Throughout it is noticed that for the most part those who drink to excess are the uncleanly, the poor, the ignorant, and especially those of bad heredity. Whatever goes with the surroundings of such classes is going to be associated with the alcoholic. The stomach of the alcoholic becomes upset; he refuses to eat, he starves, he becomes insane. The alcoholic when he does drink water will not see to the trouble of boiling it; he develops typhoid. The alcoholic does not clothe himself properly and he develops pneumonia; he sleeps in the gutter with his head on his arm for a pillow and then develops a pressure palsy—the so-called Saturday night palsy. Alcoholics seem predisposed to erysipelas, and they are liable to fractures and lacerations.

The habits alone of the alcoholic explain many of his complications; his surroundings and his pathology explain others. Filth breeds disease for which whiskey and beer are no germicides. Bad morals also breed disease and the man who has contracted a specific urethritis while on a debauch will be difficult of treatment if he keeps up his debauch. Complications multiply and these complications are hardest to treat and may fail of treatment in the drunkard.

The temporary stimulation and tone given the arterioles from alcohol will later, with relaxation, give access to the approaching pneumonia. A lobar pneumonia in a fat man who is in delirium tremens, I think I have never seen cured; in the lean, several. At a glance one can see that the consequences of a spree may furnish a clinic. It is a disputed point as to whether susceptibility to tuberculosis is favored or hindered by alcohol. An authority in Italy claims that the moderate and consistent use of wine inhibits the development of the disease; others hesitate to use alcohol at all when there is any evidence of tuberculosis. Of course, as a contributing factor to disease, there is the vastest difference between the use of alcohol and alcoholism.

Suffice it to say in conclusion that the use of alcohol begets alcoholism and alcoholism begets a host of medical and surgical affections that supply hospitals with cases and bring death to homes.

Reports from County Societies.

CUMBERLAND COUNTY.

J. H. Moore, M. D., Reporter.

The annual meeting of the Cumberland County Medical Society was held at the City Hotel, Bridgeton, on April 14, at 11 A. M., Dr. E. S. Corson of Bridgeton presiding. There were present as guests Drs. F. F. Corson of Bridgeton, J. O. Arnold of Philadelphia and Dr. J. C. Applegate of the Samaritan Hospital, Philadelphia. Drs. George E. Reading of Woodbury and C. E. Heritage of Glassboro represented the Gloucester County Medical Society.

The paper of the day was presented by Dr. J. C. Applegate, who took for his subject "Eclampsia and Its Treatment," a series of forty consecutive cases without a death being reported. This is a most remarkable record and the treatment which can produce such results deserves serious consideration. As a matter of fact, Dr. Applegate treated his patient and not the disease—a method which lies at the basis of all successful treatment. In these cases diaphoresis and fumigation, with the use of veratrum viride in itheic cases were the chief therapeutic measures. The use of morphia, irritating diuretics and purgatives such as croton oil, together with vivisection, was condemned and in none of these cases were these agents employed. The paper was practically a plea for more conservative measures and less active interference even in this most dreaded disease. The discussion was opened by Dr. M. K. Elmer. Dr. Reading of Woodbury cited a case where hypodermoclysis and nitrovenous injection of normal salt solution apparently saved life in a patient almost moribund.

The following officers were elected for the coming year: President, Dr. John C. Loper, Bridgeton; vice-president, Charles W. Wilson, Vineland; secretary, Dr. A. J. Mander, Millville; treasurer, Dr. Joseph Tomlinson, Bridgeton; reporter, Dr. John H. Moore, Bridgeton; censors, Dr. S. T. Day of Port Morris, Dr. D. H. Oliver of Bridgeton, Dr. J. W. Wade of Millville. Delegates were elected as follows: Annual delegates to State society, Dr. Irving E. Charlesworth of Bridgeton, Dr. H. Garrett Miller of Millville; permanent delegates, Dr. Walter P. Glendon of Cedarville, Dr. Ellsmore Stites of Bridgeton, Dr. Charles W. Wilson of Vineland; delegates to Salem County Society, Dr. E. T. Corson of Bridgeton, Dr. W. P. Glendon of Cedarville, Dr. J. H. Moore of Bridgeton; delegates to Gloucester County Society, Dr. D. H. Oliver of Bridgeton, Dr. Ellsmore Stites of Bridgeton, Dr. A. J. Mander of Millville; delegates to Camden County Society, Dr. H. G. Miller of Millville, Dr. C. W. Wilson of Vineland, Dr. E. S. Fogg of Bridgeton.

At the request of Dr. Phillip Marvel, medical councillor, a committee was appointed to take up the subject of post-graduate society work and report to the society at its next meeting. Dr. Ellsmore Stites was also appointed chairman of a committee, the other two members to be appointed by himself, whose duty it should be to inform the public regarding matters of mutual interest and thereby lead to better understanding of the work of the profession.

Dr. H. H. Wilson of Bridgeton and Dr. F. V. Ware of Millville were elected members of the society.

With the exception of an epidemic of measles, very few contagious diseases were reported during the past year.

The next meeting of the society will be held at Millville July 14, and, in accordance with the usual custom, will be devoted to business matters. Bridgeton, N. J., April 18, 1908.

HUDSON COUNTY.

August A. Strasser, M. D., Reporter.

The reporter finds it necessary to detail two meetings in this one report. On Tuesday evening, March 31, 1908, the Jersey City Druggists' Association invited the Hudson County Medical Society to a meeting held at the Jersey City Club, corner of Clinton and Crescent avenues, at which meeting several papers were read and questions appealing to both professions discussed. In the absence of President Bougartz, of the Druggists' Association, Vice-President Block courteously asked Dr. Mooney, vice-president of the county society, to preside with him. After a few apt introductory remarks, Mr. C. J. McCloskey read one of the two papers of the meeting. Dr. George E. McLaughlin in opening the discussion, after commending the value of these conjoint meetings to the members of both professions, asked whether it were not feasible to prevent the occasional but all too frequent variations in taste in the same medication compounded by various pharmacists. Mr. Gallagher in answer to this, while admitting that this was unfortunately still the case, yet claimed that was the one thing that they would aim at in the future. In recent comparisons made at the College of Pharmacy very little variation seemed to be the rule. Others that took part in the discussion were Drs. Blanchard, Spence, Hill, T. F. McLoughlin, Nelson, Mr. Stein of Jersey City, Drs. Chard Souloff, Broderick, Wilkinson, Dodson, Culver, Street, Rowe and Hasking. Finally Mr. Cole in a few felicitous phrases brought the discussion to a close and invited those present to partake of the refreshments provided. The collation was sumptuous and the after-dinner speaking was anything but tiresome.

The regular meeting of the county society was held at Lincoln Hotel, 631 Pavonia avenue, Jersey City, April 7, and Dr. Mooney, the vice-president, presided. Under the heading of the "Report of Interesting Clinical Cases," Dr. G. K. Dickinson detailed a case of irregular typhoid fever. A boy of ten years was taken suddenly sick, with vomiting, Fahr. 103° rectally, but no pain. Sick for three days, then apparent recovery, only to have the same symptoms recur after ten days, but this time with the addition of colicky pains, localizing themselves at McBurney's point. At this point Dr. Dickinson first saw the boy; examination revealed no marked rigidity of the recti, but rectal examination was very painful. A diagnosis of an appendicitis, in an appendix lying at the pelvic brim was thought justifiable and an appendectomy advised. The advice was accepted and at the laparotomy a normal appendix was found. The patient made no recovery and Dr. McLaughlin's services as bacteriologist were solicited. There was a marked Widal in very high dilutions but no marked leuco-

cytosis, the ratio of polymorphonuclears and lymphocytes remaining almost constant. At the end of another week there was marked pulmonary involvement, especially in the lower posterior lobe of the left lung. At this time there was a slight increase of leucocytosis. Then patient developed an endo-, myo- and partial peri-carditis. At the end of three weeks, the lung condition underwent partial resolution; temperature and pulse rate dropped. He is at present finishing his sixth week and is constantly improving.

Dr. H. Vreeland then related a similar case of typhoid. This seemed at first an influenzal invasion; then after two weeks there was a chill and diarrhœa. Inasmuch as there were two other cases of enterocolitis in children of the same family he was led astray. Later a positive Widal, temperature of 102, etc., proved the case one of ambulant typhoid. Recovery followed.

Dr. George E. McLaughlin reported the results thus far in cases in which he has used the ocular reaction in tuberculosis. Of twenty-six cases under suspicion, seventeen gave a positive reaction. He warned against its indiscriminate use in tuberculosis.

Dr. Spence detailed the history of a woman of twenty-four years, whose family history was entirely negative, and whose personal history was also so, except for slight rheumatic twinges. She had gotten an acute attack of rheumatoid arthritis in right shoulder, and later in the left shoulder, and then in the groins and thighs. Temperature remained normal. Urine contained pus, blood corpuscles and epithelium from the pelvis of the kidney. Then she developed pain over the left rectus and a scanty flow of urine, and coma lasting for forty-eight hours. Blood examination was negative. Bowels would not move except by enema, and only at that time did any urine pass; otherwise there was positive anuria. This condition of affairs continues, although the patient has now practically recovered otherwise. Close watch by two nurses has established the absolute anuria except when bowels are moved by enemata.

Dr. Pyle related a case of deep invasion of the skin in scarlatina in a child of eight or nine years of age; deep red eruption, and later in desquamating casts of the various members were easily peeled off in toto.

Dr. Paganelli reported a case where he had attained a positive result by an operation on a case of eutropion, making it possible by the manoeuvre to retain a glass eye. The procedure was described.

Dr. Kaupel detailed a case of Huntington's chorea in a child with very bad family history. The chorea had persisted for past fourteen years; this in a sister had manifested itself as cyclical vomiting and later by migraine.

Dr. Rosenkrans reported his results in a case of tubercular sinuses of both ankles treated by Bier's method of "Stamings-hyperæmic"; recovery. Also discussed his findings of the value of the painful point over the ganglion near the umbilicus, lately exploited by Robert T. Morris, of New York.

Dr. Nelson detailed the history of a child of three years, with a temperature of 101°; then an otorrhœa and a rise of fever to 106° Fahr. Otologists in consultation made a paracentesis tympani but of no avail. Finally an oculist discovered in the fundus the "choked disc." There was no leucocytosis. Death on tenth day. Autopsy. Parenchymatous nephritis and pyelitis.

Dr. Mooney demonstrated a case, showing the

result of surgical repair in fracture of the patella; injury received on February 26. Walking after five weeks. Method of operation, aponeurotic suture as practiced by Blake of New York. The paper of the evening, on "Trichiasis," by Dr. Paganelli of Hoboken, is published elsewhere.

It was discussed by Drs. Dickinson, Rosenkrans, Kaupel, Lambert. Dr. McLaughlin also pointed out the prevalence of trachoma in Naples, which led Dr. Paganelli to relate that, aside from the contagion this entailed, that 14-15 per cent. of trachoma cases went to trichiasis and entropion.

Dr. Spence, for the Legislative committee, reported on the work of the year. Four trips to Trenton were made on the osteopath bill, which was finally again withdrawn. He remarked that the fact of there being a large organization wishing certain legislation seemed to count for a great deal with our lawmakers.

Dr. Watson moved, and it was carried, that a committee be appointed to secure the nomination of one or more physicians in either party for the Assembly, to work for whom, irrespective of party affiliations, the society pledged itself.

The treasurer's report was read, audited and accepted, and the donation of \$15 toward the "Tuberculosis Exhibit" authorized, this exhibit being arranged by the Hudson County Society for the Prevention and Relief of Tuberculosis.

It was also moved and carried that the senior house surgeon or some one delegated by him from the house staff be invited from every hospital in the county to attend the regular meetings of the society.

The following new members were elected: Drs. C. L. Decker, K. H. Goldstone, Kinnerty, J. A. Sullivan, George Wilkinson, J. W. Gardner, J. S. McDede and J. E. West of Jersey City; G. W. Dräsel, G. B. Spath and Henry Lindenbaum of Hoboken; Richard Kuehne Jr., of West Hoboken; J. H. McCroskery of Weehawken; J. G. Rae of Secaucus; S. I. Myers of Bayonne; A. A. Mutter and W. R. Rieck of Arlington; J. W. Reid of Kearny; John Pringle of East Newark, and Myles O'Reilly and A. A. Mulligan of Harrison.

The secretary reported the present membership as 189. The officers elected for the ensuing year were: Drs. John J. Mooney, president; James H. Rosenkrans, vice-president; Arthur P. Hasking, reelected for secretary, and Henry H. Brinkerhoff elected for the fifteenth consecutive year as treasurer; W. P. Watson was reelected censor. The annual delegates elected were: Drs. W. W. Brooks, H. Vreeland, H. Spence, W. Pyle, C. D. Hill, G. M. Culver, T. R. Paganelli, H. H. Brinkerhoff and G. D. Fyfe. The appointment of a dinner committee by the president was authorized and the society adjourned for the year.

MERCER COUNTY.

Edgar L. West, M. D., Reporter.

The regular monthly meeting of the Mercer County Medical Society was held in its rooms Tuesday evening, April 14. The meeting was called to order at 8 P. M. by Dr. C. H. Mitchell and presided over by Dr. M. W. Reddan. The feature of the evening was an address by Dr. M. S. Simpson, of Titusville, on "Personal Experiences in the Army and Navy in Cuba, the Philippines, China and Japan." The address was illustrated with a large number of excellent stere-

opticon views made from photographs by the lecturer, and was most thoroughly enjoyed by those present.

Dr. Simpson having spent twelve years as a surgeon in the army and navy and having seen much active service was able to give many interesting personal experiences. He also described the requirements and duties of a medical officer in the United States service. After the lecture Dr. Simpson exhibited several Philippine curios and described the efficiency and methods of the native medical men.

MIDDLESEX COUNTY.

Benj. Gutmann, M. D., Secretary.

The regular annual meeting of the Middlesex County Medical Society was held at New Brunswick April 15, 1908. After an excellent dinner the society proceeded to the election of officers for the year. The officers elected were as follows: President, Ferdinand E. Riva; Vice-President, John C. Albright; Secretary, Benj. Gutmann; Treasurer, David C. English; Reporter, Arthur L. Smith; Delegates to State Society, Drs. F. E. Riva, Benj. Gutmann and William E. Ramsey.

The society extended a vote of sympathy to Dr. C. M. Slack on account of his illness; also to Dr. Henry C. Symmes, of Cranberry, because of illness. Three physicians were elected to membership, as follows: Dr. J. Percy Schureman, Dr. Howard C. Voorhees and Dr. J. Laurence Runyon, all of New Brunswick. One proposition for membership was received.

Dr. Ambrose Treganowan, of South Amboy, made an earnest plea for members to present their unusual clinical cases for discussion at the society meetings. Two interesting lectures were given, one by Mr. Twomley, of New York, on the "Ozone Method of Purifying Municipal Water Supplies," and one by Dr. Henry Mitchell, Secretary of the State Board of Health, on the "Necessity of Municipal Regulations Governing Milk." A vote of thanks was tendered Mr. Twomley and Dr. Mitchell. The meeting adjourned to meet in Metuchen in July.

SOMERSET COUNTY.

A. L. Stillwell, M. D., Reporter.

The annual meeting of the Somerset County Medical Society was held at the Ten Eyck House, Somerville, April 9. There was an unusually large number present. The following officers were elected for the ensuing year: President, Dr. H. V. Davis, North Branch; Vice-President, Dr. P. J. Zeglio, North Plainfield; Secretary, Dr. C. R. P. Fisher, Bound Brook; Treasurer, Dr. T. H. Flynn, Somerville; Reporter, Dr. A. L. Stillwell, Somerville; Censor, Dr. J. H. Buchanan, North Plainfield; Delegates to the State Society, Drs. J. H. Buchanan and P. J. Zeglio.

Dr. Howard Fox, of New York City, gave a very interesting and instructive lecture, illustrated with lantern slides, on "The Diagnosis of Syphilis." Visitors present were: Dr. W. A. Clark, of Trenton, Counsellor for this district; Dr. John W. Ward, of Pennington; Drs. Tomlinson, Murray and Carman, of Plainfield, and Dr. Dearborn, of Peapack. Drs. Peter McGill and Howard L. Kaucher, of Bound Brook, were elected members. After a sumptuous dinner furnished by Landlord Lake, the Society adjourned.

Medical Journal's Editorials.

A LAYMAN'S VIEW OF OSTEOPATHIC LEGISLATION.

Editorial Journal Americal Medical Association.

It is interesting to note the comments made by the lay press on proposed legislation along medical lines. Not infrequently the editor strips the question of all scientific aspects and states the case in the language of common sense. The March *Journal of the Medical Society of New Jersey* quotes as follows from an editorial in the *Asbury Park Journal* on the proposed osteopathic bill: "The rule qualifying doctors to attend patients should be based on a thorough knowledge of the fundamental laws of medicine and surgery. The practice by the osteopaths of manipulation should not excuse them from knowledge of the general subjects on which allopaths and homeopaths are examined, and their plea to be called doctors without examination by the State Board is not deserving of support." This point should be emphasized wherever an attempt is made to give some sect the rights and privileges of physicians without requiring them to give evidence of possessing the necessary qualifications. If applicants can demonstrate that they possess the same knowledge of fundamental subjects required of medical practitioners, there can be no legal objection to their practicing any form of treatment on which they and the patients agree. The inconsistency of the osteopathic demand is that they ask recognition as legally qualified practitioners and at the same time demand the right to specify on what subjects they shall demonstrate their knowledge. By the same reasoning any sect or cult might arise and demand examination on subjects of its own devising as a basis for legal recognition as scientific practitioners of medicine. If osteopaths or members of any other sect desire to secure the rights and privileges of legally qualified physicians let them demonstrate possession of the same degree and quality of knowledge demanded of all other practitioners.

THE STATE SOCIETY JOURNAL.

Editorial by Dr. D. Strock, in The Journal of the Camden County Medical Society.

In the April issue of the JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY Dr. David C. English, the accomplished editor, is constrained, more in sorrow, it is evident, than in anger, to reply to criticisms that have been made of the conduct of the Society's publication. In this he but follows in the footsteps of the long line of editors that goes back to the remote past; for all were told how to edit the paper. In our judgment the position taken by the editor of the JOURNAL is convincing and unassailable, and should be accepted by the profession of the State as the standard of conduct to be followed in the future. It is quite evident there is not enough material furnished by the annual meeting of the State Society to supply the pages of the JOURNAL, in its present enlarged form, for one year, and not enough papers, it would appear, are supplied from the various county societies to make up the deficit. But, even if this were not the true condition of affairs, it still remains that there is much material from other sources that can with propriety and profit be presented to the JOURNAL's readers; and the reason for this is well stated by Dr. English—they all do not have access to the other journals.

SOUTH CAROLINA PRACTICE ACT AMENDED.

Editorial Journal Americal Medical Association.

The South Carolina Legislature has passed the amendment to the medical practice act asked for by the South Carolina Medical Association. The amendment authorizes the State Board of Medical Examiners to revoke licenses when just cause is shown. The "five-year clause" in the old law, exempting physicians who have been engaged in practice for five years, has been eliminated. Osteopaths are required to qualify before the State Board of Medical Examiners, under the same conditions as any other persons who wish to treat the sick, except that they are exempt from examination in materia medica, therapeutics and major surgery. These changes greatly strengthen the medical practice act of the State. The significant feature is that exactly the same bill was introduced a year ago and failed of passage, although the personnel of the Legislature of 1907 was practically identical with that of the Legislature of 1908. Commenting on these facts, the *Journal of the South Carolina Medical Association* says: "A great transformation has taken place in the attitude of the legislators in regard to medical legislation. . . . For many years this legislation has been urged. The profession has begged and pleaded for its enactment, but until now to no avail. . . . To whom but the recognized medical profession can the statesman turn for aid in the solution of problems affecting the public health? . . . Our Legislature has had the wisdom to recognize this truth, and in a spirit of far-seeing and broadminded patriotism it has deferred to our medical profession for its judgment on these momentous questions and in so doing it has wrought even better than it knows, and has earned the gratitude of every citizen from the greatest to the humblest." The physicians of South Carolina are to be congratulated on the results achieved, and especially on the closer relationship which now exists between the medical profession and the representatives of the people—the Legislature. This united action of the profession, combined with the coöperation of an enlightened public, gives promise of better conditions in the future in public health affairs.

Annual Meetings.

AMERICAN ACADEMY OF MEDICINE.

Preliminary Program for the 33rd Annual Meeting.

The meeting will be held at the Hotel Lexington, Chicago, May 30 and June 1, 1908. The following reports of committees will be received and discussed:

"On the Best Means for the Medical Profession to take part in the Education of the General Public in Medical Matters through Publications, Etc.," Dr. Edward Jackson, Denver, chairman.

"On Teaching Hygiene in the Public Schools," and in connection with this the report of our Delegate to the Second International Congress on School Hygiene, London, 1907, Dr. Helen C. Putnam, Providence, chairman.

"On Conference with Educational Institutions on Medical Education," Dr. Charles McIntire, Easton, Pa., chairman.

As the proceedings of this conference are published in the Bulletin, this report will be con-

sidered along with the report of the special committee appointed at the conference to formulate conclusions from the papers and discussions, Dr. John L. Heffron, Syracuse, N. Y., chairman.

The report of the Delegate to the Annual Conference of the Council on Education of the American Medical Association, Dr. Charles S. Sheldon, Madison, Wis.

"To Collect Data as to the Amount of Damage Done by Alcohol in Moderate Drinkers," Dr. Woods Hutchinson, New York, chairman.

"To Prepare a Draft of an Act to Create a State Board of Medical Examiners," Dr. Charles McIntire, Easton, Pa., chairman.

The symposium for the year is on "The Place of Woman in the Modern Business World, as Affecting Home Life, through Marital Relation, Health, Morality and the Future of the Race."

Under this the following papers are promised: (1) "As Affecting the Home-Life and the Marital Relations," Dr. A. Stewart Lobinger, Los Angeles; (2) "As Affecting Health," Dr. L. Duncan Bulkley, New York; (3) to be announced, Dr. Otto Juettner, Cincinnati; (4) to be announced, Dr. Norman Bridge, Los Angeles; (5) to be announced, Dr. Edward B. Heckel, Pittsburg; (6) "The Invasion of Masculine Pursuits by Women—A Statistic Study," Dr. A. L. Benedict, Buffalo; (7) "The Influence of Modern Methods of Education upon Women, Their Home-Life, Etc.," Dr. George H. Hoxie, Kansas City, Mo.

A paper on "Some Considerations of the Necessity for a Rational Curriculum for the Doctorate," by Dr. Henry Beates, Jr., of Philadelphia.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The annual meeting of this society will be held at the Auditorium Hotel, Chicago, on May 30 and June 1. An extensive and interesting program has been prepared and every member of the Association is urged to be present, and editors of medical magazines not now affiliated with this society are also invited to meet with them.

Do not forget the dates, Saturday, May 30 and Monday, June 1.

The following papers have been promised:

Dr. T. D. Crothers, of Hartford, Conn., on "Scientific Editorial Matter."

Dr. Mary S. Johnstone, of the *Woman's Medical Journal*, Chicago, Ill., on "The Non-Scientific or Utilitarian Editorial."

Dr. George Thomas Palmer, of Springfield, Ill. (*Chicago Clinic and Pure Water Journal*), on "Editorial Individuality."

Dr. Hills Cole, of New York (*North American Journal of Homeopathy*), on "Non-Sectarianism in Medical Journalism."

Dr. Kenneth W. Millican, of the *Journal A. M. A.*, on "General Business Ethics."

Dr. Joseph MacDonald, Jr., of New York (*American Journal of Surgery*), on "The Agent, the Advertiser and the Publisher."

Dr. W. Benham Snow, of New York (*Advanced Therapeutics, etc.*), on "The Relation of the Medical Journal to the Medical Profession and Advertisers Respectively."

Dr. J. Burroughs, of Asheville, N. C. (*Gaillard's Medical Journal*), on "The Production of a Spotless Medical Journal."

Other papers will be presented and full discussion will follow all papers read.

COLLEGE OF PHYSICIANS AND SURGEONS,

COLUMBIA UNIVERSITY, N. Y. CITY.

Increased Requirements for Admission.

The College of Physicians and Surgeons, New York City, has recently made changes in the requirements for admission, and also for admission to advanced standing, as follows:

I. In regard to increasing the requirements for admission:

The present requirements for admission to the First Year Class will be continued without change up to, and including, the admission of the class which enters in September, 1909, and thereafter the requirements for admission to the First Year Class will be as follows:

All candidates for the degree of Doctor of Medicine desiring admission to the First Year Class must present (1) the Medical Student Certificate of the Regents of the University of the State of New York, and (2) also one of the following qualifications: (a) The completion of not less than two full years of study in an *approved* college or scientific school, which course must have included instruction in the elements of physics, inorganic chemistry and biology; or (b) graduation from an approved college or scientific school, or in lieu thereof a bachelor's degree in arts or science or its substantial equivalent conferred by an approved institution in Great Britain, France or Spain, or graduation from a gymnasium in Germany, Austria or Russia, or the completion of a course of study equivalent thereto—as, for example, a course of five years in a registered ginnasio and three years in a liceo; provided that the course leading to such degree or graduation has included instruction in the elements of physics, inorganic chemistry and biology; or (c) in lieu of either of the above, present such evidence as the faculty may require, to prove exceptional fitness to undertake with advantage the study of medicine.

II. In regard to admission to advanced standing to go into effect immediately:

Candidates who have completed one or more years of study in an approved medical school, and apply for admission to advanced standing at the College of Physicians and Surgeons, will be admitted to the standing to which their record in that medical school would admit them, and be given credit for all courses satisfactorily completed therein, on presentation of proper certificates covering the same; provided that the candidates before beginning the study of medicine have fulfilled the requirements for admission demanded by the College of Physicians and Surgeons. The approval of the certificates presented by such candidates rests in the Committee on Admissions who will judge of the equivalent value and of the satisfactory nature of those certificates.

All certificates should be forwarded to the Dean, Samuel W. Lambert, M. D., who will present them to the Committee on Admissions for approval.

Hypernephroma is distinguished from the other malignant tumors of the kidney by the very early appearance of hematuria.

A retropharyngeal or peritonsillar swelling that is very edematous will often disappear under the administration of large doses of aspirin.

THE JOURNAL

OF THE

Medical Society of New Jersey.

MAY, 1908.

Each member of the State Society is entitled to receive a copy of the JOURNAL every month.

Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.

All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.

SPECIAL NOTICE.

The editor has made arrangements to be away from the State the last ten days of May for a needed rest, and therefore requests that, as far as possible, all matter for the June issue of the JOURNAL be sent to him by May 15th. All important items for insertion after that, and before May 25th, should be sent to Dr. W. J. Chandler, South Orange, who has kindly consented to attend to it. Two pages will be reserved at the end for such later items. We shall plan to have that issue reach our members by June 1st.

STATE SOCIETY NOTES.

DON'T READ THESE NOTES.

A new volume of the JOURNAL begins with the next (June) issue, and all assessments should be paid at once so that your county treasurer may make his remittance to the State Society on or before May 18th. The payment of your assessment carries with it a paid subscription to the JOURNAL. This then is the last number of the JOURNAL you will receive until your assessment for the coming year is paid.

A full program of the next annual meeting of the Medical Society of New Jersey will appear in the June issue of the JOURNAL and will render unnecessary the mailing of a separate program to each member. Special programs will as usual be provided for the use of those members in attendance at the annual meeting in Cape May.

We frequently observe in the reports from County Societies the names of newly elected members. These new members sometimes fail to pay any assessment for the State Society. According to our by-laws such new members are not in *good standing*, do not receive the JOURNAL nor are they eligible to membership in the American Medical Association until their dues to the Medical Society of New Jersey are paid. These new members often wonder why these privileges are denied them. The reason is probably because their dues have not been paid or have not been forwarded to the proper officials of the State Society.

Several of the Component Societies are entitled to select nominees for permanent delegates. The following have already been selected: Bergen County, James W. Proctor, Englewood; Cape May County, Randolph Marshall. All nominees for permanent delegates are required by the constitution to present a certificate signed by the president and secretary of his component society and in a prescribed form given in the constitution, on page 15. Each nominee should see that his certificate is made out in the proper form, as failure in this respect may delay his election until the annual meeting in 1909.

C.

THE 142d ANNUAL MEETING
of the
MEDICAL SOCIETY OF NEW JERSEY
will be held at
HOTEL CAPE MAY, CAPE MAY CITY,
June 18-20, 1908.

The new hotel, just opened, is one of the handsomest and best in the country, and the manager promises to treat us royally, at about one-half the regular rate and that rate to continue until July 1st to any members who wish to stay. The proprietor will give us a banquet Friday evening, the 19th, at which Gov. Fort and other distinguished speakers have been invited to speak. The program will be an excellent one. Full particulars will be given in our June number, which will be issued early. The orations on Surgery and Medicine by Dr. M. H. Richardson, of Boston, Mass., and Dr. W. K. Newton, of Paterson, N. J., respectively, may be regarded as an indication of its excellence.

Let every Permanent Delegate and every annual Delegate make his plans to attend. Every County Society should be fully represented, if not by its elected delegates, by substitutes present to fill vacancies in the delegation. Every member of a County Society not a delegate is privileged to attend as an Associate, at the reduced rates.

Plan to Attend and Bring your families.

Be sure your lists of Members with Dues are sent in time.

THE AMERICAN MEDICAL ASSOCIATION.

The next annual meeting of the American Medical Association will be held in Chicago, Ill., June 2-5, 1908. The indications are that it will be the largest and the best annual meeting that the Association has held. The sessions of the House of Delegates will be held in the First Regiment Armory, Sixteenth Street and Michigan Avenue. The President of last year, Dr. Joseph D. Bryant, of New York City, will call the meeting to order and preside until the installation of the President-elect, Dr. Herbert L. Burrell, of Boston, Mass., who will deliver the Annual Address. The full program we have not at hand, but we can promise any of our New Jersey physicians who can attend a most interesting, instructive and enjoyable annual meeting, as Chicago is the Headquarters of the Association and the members will receive hospitable treatment.

THE DOCTOR'S CHIROGRAPHY.

We copy from a recent issue of the *Illinois Medical Bulletin* the following item, which we commend to the careful consideration of our members:

Austria has an Imperial rescript against bad handwriting in prescriptions. A druggist is forbidden to fill a prescription where the writing or any part of it, is not plainly written, or about the interpretation of which there is the slightest chance of doubt or misconception. The rescript went into immediate effect and there is said to be a remarkable improvement in the chirography of the doctors, which would go toward indicating great adaptability of effectation.

• Prescription writing is an art that needs to be most carefully studied and applied by many physicians. We have seen many prescriptions that seem to have been written in haste and were too illegible for us to clearly decipher, and some were inaccurate in describing ingredients and in dosage. We are inclined to believe that the art should not only be taught in our medical colleges, but that prescription writing should be a part of the examination for graduation and for licensure by boards of medical examiners.

While calling attention to the above item concerning the doctors' bad handwriting we may be pardoned for stating that the editor is a little sensitive and particular on this subject because of his editorial experience occasionally. While the majority of papers, reports and other matter sent for publication in the JOURNAL are typewritten—for which we return our profound thanks—many are handwritten, and of the latter a few have to be re-written or typewritten before we dare to put them into the typesetter's hands, and often corrections and interlineations are necessary. We are often in doubt as to proper names, and occasionally as to medical terms because of illegibility, wrong spelling or because, in these days of rapidly increasing numbers of medical words, they have not appeared even in recent medical encyclopedias.

OUR JOURNAL FOR OUR MEMBERS, TO RECORD THEIR WORK.

We are much pleased to note that the editorial in our April issue on "Criticism of the JOURNAL," has begun to yield some results. Some of the members of our Society are beginning to understand our position and our limitations, and are awaking to a more realizing sense of the obligation on their part to aid us in our attempt to set forth in the JOURNAL the good work the profession in our State is doing for the advancement of the science and art of medicine, in the preservation and increase of

health, the saving of human life and the improvement of sanitary conditions. Not only are our specialists in surgery, gynecology, ophthalmology and other special lines of practice doing work which compares favorably with that of our brethren in sister States and in the large cities adjoining us—New York and Philadelphia—but our general practitioners are keeping abreast the times in the practice of advanced scientific methods of diagnosing and treating disease, and our medical men in public health positions are intelligently and successfully solving the many difficult sanitary problems as far as present scientific knowledge makes it possible.

Our Hospitals are well conducted and the amount, character and success of professional work therein is incalculably great. Also in our State and other charitable institutions our medical men are rendering faithful and successful service. But our specialists and other prominent members so engaged and our less prominent members have been too busy in studying the science and practicing the art of their profession in its various branches and fields of operation to stop and report the work so worthy of record, and have thus failed to reflect credit upon the profession and the State and to help their less favored and less successful brethren *who need the knowledge they might impart*. Our JOURNAL is open to all our members and will welcome full reports of professional work from any member, and we recognize the fact that the humblest worker has sometimes imparted information that has helped the specialist and led to advance in scientific knowledge and its practical application.

We thank Dr. Strock for his kindly expressed endorsement of our editorial on "Criticism," which we give in another column, from the bright little Journal of the Camden County Society, which he edits. There is one point, however, on which he seems to misunderstand us. We make no complaint that the annual meeting fails to

furnish us papers, etc., sufficient to supply the pages of our JOURNAL for the entire year. We are glad it does not—in fact, would prefer to print them all within less time than we do rather than delay some valuable papers nearly a year—but our point is, as will be seen in the editorial above, that we wish our JOURNAL, especially during the later months of our fiscal year, to be supplied with fresh material that shall more fully report the work that the physicians of our State are doing, with original thought, with clinical cases, hospital work, etc., and that the Secretaries or Reporters will furnish full reports of meetings, discussions, etc., and procure for the JOURNAL and forward papers that their societies deem worthy of publication, with personal items. We also wish to be notified promptly of the deaths of members, with obituary notes accompanying or sent later.

INFLUENCE OF MEDICAL MEN ON LEGISLATION.

Our Legislature has adjourned and, while not desiring to pass judgment on their work as a whole, we congratulate its members and the people of our State that, as far as medical legislation—the laws affecting the medical profession and especially the lives and health of our citizens—is concerned, their work is worthy of commendation, while they are worthy of much praise for refusing to enact laws which the members of our profession condemned because they were against the health interests of the people and were calculated to retard greatly the progress of scientific knowledge.

As we said in our April issue, the medical men of our State had no occasion to oppose Senate Bill No. 61, organizing a new State Board of Health, though we are decidedly of the opinion that the bill drawn by Judge W. H. Lanning, which we will insert in the June issue of the JOURNAL (with Bill No. 61), was far preferable to No. 61 which passed, and would have better

conserved and promoted the health of our citizens. The members of the present State Board of Health and their employees who for several years have served so faithfully—the few at meagre salaries and the members who have served at much sacrifice without pay—deserve our hearty commendation. We shall await with deepest interest and large expectation the work of the new board, all of whom will be salaried men. The outlook for efficiency and success will depend largely upon the ability and fidelity of the men whom the Governor shall appoint.

The defeat of Assembly Bill No. 118, known as the Anti-Vivisection bill, was due largely to the intelligent and masterly management shown by our president, Dr. E. J. Ill, in presenting, at the hearing granted by the Assembly Committee, through the arguments of eminent scientific men, the objections to the bill as affecting scientific study and research and the highest welfare of humanity. The defeat of Assembly Bill, No. 263, known as the Osteopathic bill, under the excellent work of our Committee on Legislation, as set forth by its chairman, Dr. L. M. Halsey, in another column of this issue, was another great victory.

It will be seen that there is abundant cause for us to be proud of the work and influence of the medical men of New Jersey and to congratulate our State Society and the public that our Society's long record for unselfish devotion to the interests of the citizens of our State and to humanity at large is being maintained and that our legislators are beginning to recognize the fact that medical men are the most competent advisers in matters affecting the lives and health of the people, to respect our judgment and give due weight to our unselfish public-spirited advice.

We believe the record we have made the past winter will make our work less difficult hereafter, especially if we continue to send able medical men of good judgment to our Legislature as members and increase their number. Drs. Lowrey and Ramsay, who were members of this year's Assembly,

should be returned with other physicians, and we ought to have an able representative of our profession in the Senate.

CLOSING ANOTHER YEAR.

According to the change in the By-Laws of our Society at the last annual meeting, making our fiscal year begin June 1st each year, this issue of our JOURNAL closes another year. We believe it has been a year of progress and improvement in the size and character of the JOURNAL even if it has not yet reached our ideal of what it ought to be, representing such a time-honored Society with such an intelligent membership which has ever been loyal in guarding the highest interests of the State and its citizens. We have endeavored to maintain a clean and dignified JOURNAL, advocating what we believed to be true and honorable, in serving the profession and the State. We have opposed what we conscientiously believed to be wrong or harmful to the highest welfare of both or either, even at the cost of being misunderstood or censured by some with whose judgment we have differed but of whose honesty we had no doubt; so that if we have possibly erred in any instance we ask that the aggrieved will reckon it an error of the head rather than of the heart. We have unfalteringly stood for the protection of the people against charlatanism, quackery and the nostrum evil and for the protection of the rights and honor of the profession against low life insurance fees and contract practice at less than regular rates.

The Editor returns his sincere thanks to the Publication Committee for their invariable courtesy, helpfulness and support; to the Secretaries and Reporters of the County Societies for their kindly and faithful coöperation and to all others who have recognized the fact that the success of the JOURNAL depends not alone on the Editor and the Publication Committee, but on the loyalty and faithfulness of the members of the Society, and, being aware that it is their JOURNAL for whose success they have a re-

sponsibility, have tried to meet that responsibility, even though to some it may have been—as in the Editor's case—in an imperfect way.

Correspondence.

COMMITTEE ON LEGISLATION.

Luther M. Halsey, M. D., Chairman.

To the Editor of the Journal, Medical Society of New Jersey:

As the Legislature has adjourned and the work on the Committee on Legislation has practically finished for the year, it seems an opportune time to give the members throughout the State a synopsis of the work that we have done during the session which has just closed, and to bring to their notice some suggestions as to what we deem best for the future, and the proper mode of campaign for the ensuing year.

The Osteopath bill was not introduced this year until March. The chairman of the Committee on Public Health, to which this measure was referred, granted a hearing on the bill but it was done in such a quiet way that none of the members of the legislative committee received any notice of the time set for the hearing. The President of the State Society, Dr. Ill, of Newark, through Dr. Lowrey, a member of the Legislature from his county, was notified of the hearing and was present, with a few physicians from his own county. The legislative committee was very much surprised to find out that this hearing had been held and immediately demanded that an additional hearing be granted to the medical men for the purpose of thoroughly presenting our side of the question and refuting the arguments of the osteopaths. At the second hearing we had a very fine representation from almost every section of the State. As Dr. Lowrey was a member of that committee, he succeeded in giving us ample time for all our speakers. Our side of the question was very ably presented, showing conclusively that the osteopaths wanted all the rights and privileges of physicians, but were not willing to obtain that privileges in the same way that others had done. There was an entire absence of ridicule in any of the arguments presented by our side, but there were strong, forceful presentations of the case and appeals to the members of the Public Health Committee that it was absolutely necessary to throw all the safeguards possible around the citizens of New Jersey for the protection of their health and life.

Through the good work of Drs. Lowrey and Ramsay, two physicians who were members of the House, we were able to make a poll, and ascertained that should the bill be reported by the committee it would be impossible for it to pass. This fact alone shows the necessity for having medical men in the Legislature, as only in this way can our interest be carefully looked after. Your committee presented to the Public Health Committee a substitute which was based upon the Frelinghuysen bill of last year, with some modifications, to comply with the present law and to make it more stringent. The osteopaths of course were not willing to accept our substitute and during the next two weeks offered to us two separate substitutes, which we immediately rejected, and

Mr. Morgan, who introduced their original bill for them, asked the unanimous consent of the House for its withdrawal, which was done.

We had already taken steps to make a careful canvass of the Senators and were assured that should the bill pass the House, it would fail in the Senate. The good friend of the State Medical Society, Senator Frelinghuysen, was carefully watching all movements that they made.

While this measure is disposed of for this year, it only means a cessation until the next session of the Legislature, as undoubtedly they will try again. This necessarily entails needless expense, in our judgment, upon the State Society, as we should have a bill prepared which would meet with the approval of the profession throughout the State, have it introduced early in the session, and with our exertions have it passed. I think that a bill legalizing them as masseurs would probably meet with the general approval of the entire profession, and then so amending the medical law that after they have given satisfactory evidence to the Board of Medical Examiners that they have completed a four years' course of study, allowing them to appear before the Board to be examined and to practice what they desire. Along these lines, in my judgment, is the only solution of the problem. We assisted in passing an amendment to the present medical law which allows graduates in medicine, prior to '95, who could not fulfill the preliminary educational requirements, to come before a Board and be examined, which is just and right. We assisted in the passage of the bill for the reorganization of the State Board of Health, and while this is not an ideal measure in the judgment of your committee, we trust it will be a marked step in advance.

The committee felt that the Board should consist of eight members instead of six, the additional members to be a veterinarian and a pharmacist of recognized ability. We were firmly convinced that the State Tuberculosis Commission should be legislated out of office and this entire matter put under the control of the State Board of Health. We hope that proper men will be appointed to the new Board, that will put it on the basis where it should justly belong. We found that, as has been the history of the past, that there is a certain element in the Legislature which is opposed to practically everything that medical men advocate, claiming that physicians are interested for or against a bill from purely selfish or mercenary motives. This brings us down to an argument that we have advocated for several years in communications to the several district medical societies and before the State societies, urging upon the members a campaign of education and that there should be a more intimate relationship between physicians and the laity.

Mistakes and failures are always inevitable, but it is upon mistakes and the intelligent interpretation of failures that success is built. Our mistakes and failures have been because we have not taken the public more into our confidence.

Ex-President Cleveland, in his address before the Medical Society of the State of New York, said: "We have come to think of ourselves as worthy of confidence in the treatment of our ailments, and we believe if this is accorded to us in a greater measure, it would be better for the treatment and better for us. We do not claim that we should be called into consultation for all our illnesses, but we should be glad to have a little more explanation for the things done for us." This is undoubtedly the keynote of one of the

modes of progress that physicians should adopt in medical practice, and there should be more marked in the external relationship of the physicians and laity. It is high time that the medical men realized that the public are entitled to truth, that exaggeration and sensationalism are boomerangs that will too often come back and hurt the whole profession. The efforts of many prominent medical men to give the public useful information through the lay press is worthy of praise. The public need a world of teaching, instruction in hygiene and sanitary matters, and let us promise ourselves to tell them the truth. Let us be ready to sound the alarm when necessary, but do not create suspicion and destroy confidence, which always has been and always will be the greatest of all medical assets.

L. M. HALSEY, *Chairman.*

Williamstown, N. J., Apr. 21, 1908.

Current Medical Literature.

"Nose Drinking," a New Vice.—In Norway there is a short cut to intoxication much favored in the city slums. The drunkard fills the palm of his hand with "aquevit" (strong corn brandy) and sniffs it through his nose. A few applications do the work, while the same quantity of liquor taken into the stomach would hardly be felt. "Nose-drinking" has become a real vice with some individuals, Norwegian papers say. The effect of it is terrible, because the whole nervous system is paralyzed in a moment, and the drunkard remains almost unconscious for several minutes. Afterward a sleepy fatigue is felt, as after smoking opium.—*American Medicine.*

Inguinal Colostomy.—Garrigues, in the *Amer. Jour. of Surgery* (January, 1908), has applied the gastrostomy operation of Ssabanifew-Frank to inguinal colostomy with a view of obviating the disagreeable effects of leakage of feces, fluid and gases. He has performed the operation once, and while the patient lived only three days after operation (it was a case of cancerous masses), it seemed to answer thoroughly the purpose for which it had been devised. A three-inch incision is made through the left linea semilunaris at the level of the superior iliac spine, into the peritoneal cavity, and a loop of the colon is pulled out. A second incision, about two inches long, is made about two or three inches outside the first, and the subcutaneous tissue and the skin are undermined between the two incisions; the exact position of the second incision depends somewhat on the length of the mesentery, which should be put gently on the stretch. A running suture is inserted between the peritoneum and deep fascia on the one side and the muscular layers of the intestines on the other, at the base of the loop of intestine that has been pulled out. The intestine is now drawn through from the first to the second incision underneath the bridge of skin and subcutaneous tissue. A running suture is inserted, uniting the skin and the end of the loop of intestine to the second incision. The skin and subcutaneous tissue of the first incision are now sutured. The intestine is opened in the second incision if the case is an urgent one, but if possible twenty-four hours should be allowed to elapse before the intestinal incision is made.—*Jour. A. M. A.* (February 29, 1908.)

An Improved Abdominal Subtotal Hysterectomy.—W. F. Metcalf, Detroit (*Journal A. M. A.*, December 7), describes and illustrates an operation for supravaginal hysterectomy in which none of the cervical mucosa is left, only a strip of cervical tissue remaining stretched like a hammock almost horizontally across the pelvic straight from side to side after the ligaments and vessels have been secured. Over this hammock is thrown the peritoneal flap attached to the bladder, the edge of this flap being stitched posterior to the hammock, the sutures passing through the cut ends of the uterosacral ligaments. The operation, he claims, leaves the remaining pelvic organs well supported and the restoration thus effected helps to preserve the normal intra-abdominal pressure. Tabulated statistics are given of the results, covering not only the general facts as to the relief of the conditions for which the operation was performed and the mortality of the operation, but also the various functional and sensory symptoms following. Histories, with autopsy records when obtained, of the fatal cases are also given. By this method, Metcalf claims, all the gland-bearing tissue of the cervix is thoroughly removed; the pelvic cavity and lymphatics are thoroughly drained; support of the remaining pelvic organs is assured, with consequent lessened subsequent bladder irritability and the maintenance of more nearly normal intra-abdominal pressure.

The Sensitive Short Uterosacral Ligament; Its Clinical Significance and Treatment.—At the recent annual meeting of the Southern Surgical and Gynecological Association Dr. Edward J. Ill, of Newark, N. J., drew attention to the sensitive short uterosacral ligament as a pathological entity. Schultz and Burrage wrote of the condition long before this. Schultz gave no special advice as to treatment, while Burrage recommended incision of the ligament through an abdominal section. Ovaries had been sacrificed under false apprehension. The condition should not be confounded with introperitoneal adhesions, nor with shortening of the base of the broad ligament, due to scars resulting from puerperal injuries. Outside of the acute pelvic exudate, the writer knew of no condition so painful on pressure as the short and sensitive uterosacral ligament. During the last twelve years 5 per cent. of all his operative gynecological patients suffered with a short and sensitive uterosacral ligament. When but one ligament was diseased it occurred in 73 per cent. on the left side. The disease might be congenital or acquired either in childhood or during active sexual life. Because of the short ligament a fixation of the uterus resulted. The circulation of the organ became impaired. Catarrhal and metritic changes resulted in menstrual disturbances. In the acquired case, when but one ligament was short and sensitive, the pain was commonly referred to the sacroiliac synchondrosis or the iliac region of that short side. Menstrual pain seemed to be common to all, and was produced by metritic and endometritic changes. The neurasthenic cases offered a bad prognosis. Sterility was a frequent symptom, and abortion sometimes resulted from a very short ligament. The objective symptoms, when both ligaments were shortened, were to elevate the uterus and drag it into the hollow of the sacrum. Its mobility was much impaired. When one ligament was short the uterus was elevated and displaced to the side of the short ligament and retroposed.

The short ligament stood out sharply when the cervix was drawn forward and downward. Great pain resulted from such procedure. The prognosis was bad for those who came from a neurotic family, or where from long-standing conditions the resulting pathological changes had become incurable. The operation suggested by the writer consisted of a most thorough stretching of the tense and sensitive uterosacral ligaments while the patient was under profound anesthesia, until the uterus became freely movable. A free dilatation of the uterus with graduated steel sounds, curettage, etc., should be added.—*N. Y. Medical Record*.

Obscure Gastrointestinal Cases.—J. Hoelscher in the *Journal A. M. A.*, June 15, gives case histories of three patients suffering with intermittent gastrointestinal attacks characterized by gaseous distention, hyperacidity, pain or nausea, and vomiting; all were resistant to medical treatment. In one case there was no history of any causal disease, but there were severe pain and jaundice; cholecystenterostomy, however, revealed no gallstones. In the second case the disorder followed typhoid fever, in the third there had been a severe burn and traumatism and the symptoms justified the diagnosis, confirmed by operation, of healed duodenal ulcer and partial obstruction. In the first two cases there were found gastric dilations and displacement, and adhesions of the stomach and intestines, which were released; in the third case a gastroenterostomy was performed. Improvement resulted in all three after operation. Hoelscher calls attention to the fact that an intestinal lesion may give rise almost exclusively to gastric symptoms, and says that the diagnosis of gastric neuroses and chronic gastric catarrhs will become fewer when surgery is resorted to. It may give prompt and complete relief, though usually the changes that have taken place in the musculature and glands of the stomach are such that it may be a long time before the patient will be altogether normal. The differential diagnosis calls for careful distinction as regards gastric ulcer, chronic cholecystitis, gallstones, and gastropotosis. Proper surgical interference gives better results than long-continued medical treatment. The usual secondary symptoms of faulty gastrointestinal chemistry included under autointoxications should not be overlooked.—*N. Y. Medical Record*, June 22, 1907.

The Mental Origin of Neurasthenia and Its Bearing on Treatment.—D. Drummond, in the *British Medical Journal* (Dec. 28, 1907), points out the fact that in neurasthenia the physical symptoms are generally without any physical basis. The mental history of both the patient and his family are of great importance. It may be difficult to have a definite family history, but with care this can usually be made out and not infrequently it will include cases of insanity. Clinically considered, this is of much importance in establishing the mental origin of the neurasthenic disorder; in practice what it points to is the fact that serious dangers particularly threaten persons who inherit a nervous temperament, for whom, therefore, special safeguards in home surroundings and personal habits ought to be observed, just as those who inherit a tendency to tuberculous mischief must observe careful precautions in their surroundings and manner of life if they are to escape harm. Drummond believes that overwork, mental strain in business or other

ways, the grief of bereavement, or some alarming shock, do not in themselves produce neurasthenia and cannot be said to be its cause, though by lowering health and weakening mental control they may contribute to the development of the more serious disturbance. On the other hand, he emphasizes the cramping and damaging effect on the mind of uncontrolled and bad habits of thought in early life, partly because of its testimony to the mental origin of neurasthenia, and also on account of a growing conviction that to such habits may be ascribed a great deal of the depression and mental discomfort from which nearly every one suffers at times. Treatment calls for a combination of insight, sympathy, and firmness that all do not equally possess. The personal factor of the physician cannot be overlooked or minimized. There must be an honest and straightforward statement to the patient dealing with the facts of the case—a statement that enters fully into its pathology and touches lightly upon the symptoms; a statement that, by its very firmness, disinterestedness, and kindness, wins the confidence of the patient, and encourages him to think better of himself, and to make a real effort to rise above his trouble and ignore himself. The power to help and encourage our nervous invalids undoubtedly increases with experience and practice; and the sooner we begin to talk rationally to them the sooner will we acquire the art of curing them.—*N. Y. Medical Record*.

Book Reviews.

MEDICAL GYNECOLOGY. By Howard A. Kelly, A. B., M. D., LL. D., F. R. C. S. (Hon. Edin.), Professor of Gynecological Surgery in the Johns Hopkins University and Gynecologist to the Johns Hopkins Hospital, Baltimore; Fellow of the American Gynecological Society, Honorary Fellow of the Edinburgh Obstetrical Society and of the Royal Academy of Medicine in Ireland, etc., etc. With one hundred and sixty-three illustrations. One volume cloth, pp. 662. 1908. D. Appleton & Company, New York and London.

From our knowledge of the author and of his previous contributions to medical literature we expected to find this volume a practical and valuable one, and we have by no means been disappointed. The scope of the work may be inferred from Dr. Kelly's words in the Preface and the Table of Contents. He refers to the relationship of the gynecologist's specialty to the field of general practice. In reviewing the course of the evolution of scientific medicine the doctor says: "The general practitioner yields up to a little group of investigators that portion of his territory which is most obscure and difficult in which he has made the least progress; the field is diligently cultivated and a specialty is formed. Then in time the specialist so simplifies the etiology, the diagnosis and the treatment, that he is able to hand back a part at least to the general practitioner, with whom he continues in relations of harmony and sympathy, so that both work conjointly to a common end, namely, the extinction of disease and the amelioration of its ravages. It will be my effort in the following pages to review my special field, in an endeavor to return to the general practitioner that portion of it which he ought to recover by right of his prior lien."

The twenty-six chapters embrace the following subjects: Consulting Room and Appointments and

Gynecological Examinations; Hygiene of Infancy and Girlhood; Normal Menstruation and Menopause, Dysmenorrhœa, Dilation and Membranous Dysmenorrhœa; Intermenstrual Pain; Amenorrhœa and Vicarious Menstruation; Menorrhagia, Metrorrhagia and Extra-Uterine Pregnancy; Constipation, Headache, Insomnia and Obesity; Backache and Coccygodynia; Acute Infectious Diseases as a Cause of Pelvic Disease; Vaginitis, Vulvitis, Cervicitis and Endometritis; Pruritis, Vaginismus and Masturbation; Displacements of the Uterus; Pelvic Inflammatory Disease; Sterility; Gonorrhœal Infection; Syphilis; Abortion; Injuries and Ailments following Labor; Fibroid Tumors; Carcinoma, Diagnosis and Palliative Treatment; Cystitis; Functional Nervous Diseases met with by the Gynecologist; Appendicitis in Association with Pelvic Disease; Splanchnoptosis and Movable Kidney; Post-Operative Conditions.

Among the able practitioners to whom Dr. Kelly acknowledges his indebtedness for contributions to this volume, is Dr. Edward J. Ill, who contributed the chapter on Abortion. The illustrations, of which there are 163, are unusually good, and the general excellence of the volume—in all its chapters—is so marked that we have no hesitation in commending it as worthy a place, for practical use, in the library not only of the gynecologist, but also of the general practitioner.

THE BLUES—SPLANCHNIC NEURASTHENIA—CAUSES AND CURE. By Albert Abrams, M. D. (Heidelberg), F. R. M. S., Consulting Physician, Denver National Hospital for Consumption, Mount Zion and the French Hospitals, San Francisco, etc. Illustrated. Third edition, revised and enlarged. E. B. Treat & Company, New York; pp. 287. \$1.50.

This is an interesting book that repays careful reading. The author in describing this form of neurasthenia refers to its origin as a congestion of the intra-abdominal veins and claims that no variety of neurasthenia is more amenable to treatment than the splanchnic form; that we can by proper treatment offer sufferers from it not only amelioration but cure in many cases. The various causes are ably set forth at some length, as are the measures for the relief and cure of this condition which to so many tends to make life miserable.

BRADYCARDIA AND TACHYCARDIA, with complete English Abstracts and Foreign Bibliography. Part II. in a series of monographs on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation. By Prof. Edmund Von Neusser, Professor of the Second Medical Clinic, Vienna; Associate Editor of Nothnagel's Practice of Medicine. Authorized English Translation by Andrew MacFarlane, M. D., Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College, etc. 150 pages, cloth. Price \$1.25 prepaid. New York: E. B. Treat & Co. 1908.

Dr. Von Neusser gives in this volume the various conditions which induce Bradycardia and Tachycardia. Brief space is given to the prognosis and treatment of the former, and to the etiology, diagnosis and treatment of paroxysmal tachycardia, which is specially described in contradistinction to symptomatic tachycardia. The Appendix gives brief notes on The Cause of the Heart Beat; Adams-Stokes Symptom Complex; Adams-Stokes Disease, and Foreign Bibliography on these diseases.

Personal

Dr. Duncan W. Blake, of Gloucester City, who has been in practice for forty years, has retired from practice and moved to his farm near Seaville, Cape May County.

Dr. Sylvan G. Bushey, president of the Camden County Society, still continues too ill to resume practice. Of the same county three other members have been laid aside—**Dr. Harry Jarratt** since January, **Dr. Robert Casperson** since December and **Dr. Joseph E. Hurff** recently.

Dr. E. L. B. Godfrey, of Camden, and his wife, who spent the months of February and March in Florida, South Carolina and Virginia, have returned to their home in Camden, where the doctor has resumed his practice.

Dr. W. H. Hicks, of Newark, first assistant Superintendent of the Essex County Insane Hospital, has resigned on account of ill health.

Dr. W. A. Wescott, of Berlin, Camden County, recently read an able paper before his county society, on "Therapy of the Insane," which is printed in the county society journal.

The report of the death of **Dr. Lewis B. Parsell**, of Closter, N. J., came just as the JOURNAL went to press. He was a member of the Bergen County Medical Society and was fifty-six years of age.

BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

Monthly Statement of Vital Statistics— March, 1908.

Of the 3,268 deaths reported to the State Bureau of Vital Statistics for the month ending March 15, 1908, 392 were caused by pneumonia, a decrease of 124 from the previous month; 265 were caused by diseases of the respiratory system (pneumonia and tuberculosis excepted); 344 from pulmonary tuberculosis, 402 from diseases of the heart and circulatory system, 407 from diseases of the nervous system. Bright's disease caused 223 deaths, suicide 46 and cancer 130.

Statement of mortality in New Jersey for the month ending March 15, 1908, and the average for the previous twelve months—the latter are given in brackets:

Total deaths, all causes, 3,268 (3099); under one year, 541 (464); ages between one and five years, 267 (268); over sixty years, 1049 (870). Important causes of death—Typhoid fever, 35 (38); measles, 12 (13); scarlet fever, 51 (26); whooping cough, 18 (21); diphtheria, 66 (53); malarial fever, 3 (2); tuberculosis of lungs, 344¹ (312); tuberculosis of other organs, 63 (48); cancer, 130 (123); cerebro spinal meningitis, 29 (31); diseases of nervous system, 407 (385); diseases of circulatory system, 402 (327); diseases of respiratory system (pneumonia and tuberculosis excepted), 265 (184); pneumonia, 392² (277); infantile diarrhœa, 47 (204); diseases of digestive system (infantile diarrhœa excepted), 162 (201); Bright's disease, 223 (212); suicide, 46 (31); all other causes, 573 (611).

¹Tuberculosis (lungs) reported number deaths previous month, 375.

²Pneumonia reported number of deaths previous month, 516.

v.4	Medical society of New Jersey	73455
1907-08	Journal.	

Library Re

73455

